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## PERSONALS.

Mr. C. C. Barr has been appointed Receiver of the Street Ry. Co., of Streator, Ill.

Mr. G. Herrick, civil engineer, of Wheaton, Ill., has been elected County Surveyor.

Mr. Arthur B. Pomme, civil engineer, of Herkimer, N. Y., committed suicide Nov. 28.

Mr. James H. Meagher has been appointed Commissioner of Public Works of Syracuse, N. Y.

Mr. Francis F. Furlong, mining engineer, of Butte, Mont., was drowned at Vancouver, Nov. 16.

Mr. Alexander Trippell, mineralogist and copper mine owner, of Tucson, Ariz., died in New York city, Nov. 25.

Mr. Myles Pennington, the first General Manager of the Grand Trunk Ry., died at Toronto, Ont., Nov. 27, aged 82.

Mr. James J. Houston, formerly Superintendent of the W. A. Bader Glue Works, of Springdale, Pa., died Nov. 27, aged 60.

Mr. E. H. Bankard has been appointed Traveling Agent of the Baltimore & Ohio R. R., succeeding Mr. L. J. Buckley, who has resigned.

Mr. Hubbard S. Doane has been elected Water Commissioner of North Brookfield, Mass., to succeed Mr. Theodore C. Bates, resigned.

Mr. Spencer C. Browne, mining engineer, Assistant Superintendent of the Oneida mine in Amador county, California, died in Oakland, Cal., Nov. 23.

Mr. John Scott, ex-United States Senator from Pennsylvania, and formerly General Solicitor of the Pennsylvania R. R. Co., died Nov. 29, aged 74.

Mr. W. M. Reid has been elected President, Mr. Samuel Jarvis, Vice-President, and Mr. Edmund G. Vaughn, Secretary and Treasurer of the Northeast Electric Ry., of Kansas City, Mo.

Messrs. Theodore Dwight and Charles H. Warner have formed a partnership as consulting engineers in the application of electricity to mining, with offices at 13 Burling Slip, New York city.

Mr. Lea McIlvaine Luqueer, civil engineer, Tutor in Mineralogy in the School of Engineering of Columbia University, New York city, was married Dec. 1 to Miss Anne Low Pierrepont, of Brooklyn, N. Y.

Mr. M. M. Duncan, General Manager of the Antrim Iron Co., Mancelona, Mich., has been appointed manager of the Cleveland Cliffs Iron Co., at Ishpeming, Mich., to succeed Mr. Frank P. Mills, who has resigned.

Mr. William Taylor, civil engineer, of Kennett Square, Pa., died Nov. 27, aged 65. He was a brother of the late Bayard Taylor, the well-known author and poet, and was engaged chiefly in water-supply engineering.

Mr. William Quinn, Trainmaster of the Cairo Division of the Cleveland, Cincinnati, Chicago & St. Louis Ry., with headquarters at Mt. Carmel, Ill., has been appointed Superintendent of the same division to succeed Mr. W. G. Bayley, transferred.

Mr. Jacob G. Dettmer, Vice-President of the People's Trust Co., of Brooklyn, N. Y., has been appointed Park Commissioner of that city by Mayor Wurster, to succeed Mr. Timothy L. Woodruff, who is Lieutenant-Governor-elect of New York.

Mr. George F. Evans, Assistant General Manager of the Boston & Maine R. R., with headquarters in Boston, has been elected Vice-President and General Manager of the Maine Central R. R., with offices at Portland, Me., to succeed Mr. Payson Tucker.

Mr. J. Spencer Caldwell, formerly Division Engineer and now Acting Assistant General Roadmaster of the Hudson Division of the New York Central & Hudson River R. R., with headquarters at East Albany, N. Y., was married Nov. 19, to Miss Gertrude E. Van Buskirk.

Gen. Chas. H. T. Collis, Commissioner of Public Works, of New York city, sailed for Southampton, England, on the "St. Paul," Dec. 2, for a vacation tour of four weeks. While abroad he will study features of the public works departments of several of the European cities.

Mr. Joseph R. Thomas, M. Am. Soc. C. E., editor of "The American Gas Light Journal," published in New York city, died at Glen Ridge, N. J., Nov. 28. He was born in Burlington, N. J., in 1819, and was in the charge of the Williamsburg (N. Y.) Gas Works for 30 years.

Mr. T. J. Bray, Secretary and Superintendent of the Ohio Tube Works of Warren, O., has resigned, and will shortly begin business in Pittsburg, Pa. Mr. F. M. Post, Treasurer of the company, has been appointed to succeed him.

Mr. W. G. Bayley, Superintendent of the Cairo Division of the Cleveland, Cincinnati, Chicago & St. Louis Ry., and Engineer of Maintenance of Way, has been appointed Superintendent of the St. Louis Division, with headquarters at Mattoon, Ill., to succeed Mr. E. M. Neel, transferred.

Mr. Samuel B. Dick, of Meadville, Pa., has been appointed Chairman, Mr. James H. Reed, of Pittsburg, President, and Mr. J. T. Odell, Vice-President, of the new Butler & Pittsburg R. R. which, it is reported will be consolidated shortly with the Pittsburg, Shenango & Lake Erie R. R.

Messrs. Olin Merrill, of Enosburg Falls, Z. S. Stanton, of Roxbury, and Frank Kenfield, of Morrisville, have been appointed Railroad Commissioners of Vermont for two years. Mr. Merrill was chairman of the last Board and will retain the same position with the newly appointed Board.

Mr. Robert B. Allen mining engineer, died at Allisonia, Va., Oct. 26. He was for a number of years engaged in mining work in this country and Mexico, and was at one time Chief Engineer of the Bureau of Mines in the State of Coahuila, Mexico. He was much interested in the development of the monazite industry in North Carolina, and in 1893 and 1894 spent considerable time in that State.

Mr. William D. Andrews, manufacturer of pumping and hoisting machinery, New York city, died Nov. 23. He was born in 1818, and in 1833 the family came to New York, where his father opened an iron yard in 1836. He was associated with his father, and in 1840 became interested in a wrecking company, with which he remained until 1847. His first invention was a centrifugal pump for raising sunken ships by pumping them out. He also held some 37 patents for hoisting machines.

Mr. Robert E. Marshall, M. Am. Soc. M. E., Superintendent of the Altoona Division of the Pennsylvania R. R., committed suicide at his brother's residence in Washington, D. C., Nov. 30. He was born in Leeds, England, in 1862, and graduated from the Columbian University, Washington, D. C. He entered the railway service in the shops of the Pennsylvania R. R. at Altoona, Pa., in March, 1881, and was rapidly promoted. He was a member of the Southern & Southwestern Railway Club and of the Master Car Builders' Association.

Mr. William Steinway, a member of the Rapid Transit Commission of New York city, died Nov. 30. He was born in Seesen, near Brunswick, Germany, Mar. 5, 1836, and came to America in 1850. In 1853, with his father and two brothers, he founded the house of Steinway & Sons, piano manufacturers. He was elected a member of the Royal Academy of Berlin, about 1870, and in 1892 was appointed Pianoforte Manufacturer to the Emperor of Germany. He was the President of the Rapid Transit Commission, which was appointed under the act of 1890, and was also made a member of the present commission. He was a Director of the Steinway Ry. Co., of Long Island City, and of the New York & College Point Ferry Co. The town of Steinway, on Long Island, where a considerable part of his piano manufacturing was done, was begun by him in 1871.

Prof. Benjamin Apthorp Gould, astronomer, of Cambridge, Mass., died Nov. 26. He was born in Boston, Sept. 27, 1824, and graduated from Harvard College at the age of 19. After a year's teaching he went to Europe, where he completed his studies. Upon his return to the United States he was employed by the U. S. Coast and Geodetic Survey to determine astronomically the locations of the various geodetic stations. He established the station at Valentia, Ireland, from which the difference in longitude between Europe and America was determined, and connected the continents by the most precise observations. He established the first astronomical journal ever published in the United States, and between 1855 and 1858 organized the Dudley Observatory at Albany, N. Y. The Cordoba Observatory, in the Argentine Republic, South America, was founded by him, as well as the many meteorological stations extending from the tropics to Terra del Fuego on the one side of the South American continent, and from the Andes to the Atlantic on the other. He was a member of the Royal Astronomical Society of London, of the French Academy of Sciences, of the Academy of St. Petersburg, and of the American Academy of Science.

## ENGINEERING SOCIETIES.

### COMING TECHNICAL MEETINGS.

ENGINEERS' CLUB OF PHILADELPHIA.
Dec. 5. "Electric Cranes," by C. W. Pike and A. J. Rowland. Secy., L. F. Rondinella, 1122 Girard St.
CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Dec. 7. Secy., C. L. Annan, City Engineer's Office.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Dec. 7. Secy., Carleton Greene, Library Bldg., Buffalo.
DENVER SOCIETY OF CIVIL ENGINEERS.
Dec. 8. Secy., Walter Pearl, 36 Jacobson Bldg.
NORTHWESTERN SOCIETY OF ENGINEERS.
Dec. 8. Secy., D. W. McMorris, 635 Burke Block, Seattle, Wash.
NORTHWEST RAILWAY CLUB.
Dec. 8. Secy., T. A. Foque, Soo Line, Minneapolis.
WISCONSIN POLYTECHNIC SOCIETY.
Dec. 8. Secy., W. K. Means, Loan and Trust Bldg., Milwaukee, Wis.
NEW ENGLAND RAILROAD CLUB.
Dec. 9. Secy., Edwd. L. Jones, P. O. box 1158, Boston.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Dec. 10. Secy., James K. Zollinger, Norton Bldg.
ENGINEERING ASSOCIATION OF THE SOUTH.
Dec. 10. Secy., L. P. Brown, Nashville, Tenn.
NORTHWESTERN TRACK AND BRIDGE ASSOC.
Dec. 11. Secy., D. W. Meeker, St. Paul, Minn.
AMERICAN SOCIETY OF IRRIGATION ENGINEERS.
Dec. 11 and 12. Annual meeting in Denver. Secy., John S. Titcomb, Room 36, Jacobson Bldg., Denver, Colo.
NEW JERSEY SANITARY ASSOCIATION.
Dec. 11, 12. Annual meeting at Lakewood, N. J. Secy., J. Madison Watson, Elizabeth, N. J.
MONTANA SOCIETY OF ENGINEERS.
Dec. 12. Secy., Forrest J. Smith, Denver Block, Helena.
INDIANAPOLIS ENGINEERING CLUB.
Dec. 12. Secy., C. C. Brown, Indianapolis, Ind.
ENGINEERS' CLUB OF KANSAS CITY.
Dec. 14. Secy., F. W. Tuttle, Baird Bldg.
NATIONAL IRRIGATION CONGRESS.
Dec. 15, 16 and 17. Annual meeting at Phoenix, Ariz. Secy., C. M. Heintz, Los Angeles, Cal.
ENGINEERS' SOC. OF WESTERN PENNSYLVANIA.
Dec. 15. Secy., Daniel Carhart, 410 Penn Ave., Pittsburg.
COLUMBIAN ENGINEERING SOCIETY.
Dec. 15. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 16. Secy., F. Van Vleck, Los Angeles, Cal.
ASSOCIATION OF ENGINEERS OF VIRGINIA.
Dec. 16. Secy., J. A. Pilcher, Roanoke, Va.
BOSTON SOCIETY OF CIVIL ENGINEERS.
Dec. 16. Secy., S. E Tinkham, City Hall.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
Dec. 16. Secy., R. W. Pope, 26 Cortlandt St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
Dec. 16. Secy., A. Sorge, Marquette Bldg., Chicago.
ENGINEERS' CLUB OF ST. LOUIS.
Dec. 16. Secy., Wm. H. Bryan, Turner Bldg.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
Dec. 16. Secy., C. W. Hunt, 127 E. 23d St., New York.
WESTERN RAILWAY CLUB.
Dec. 17. Secy., W. D. Crossman, The Rookery, Chicago.
ENGINEERS' CLUB OF CINCINNATI.
Dec. 17. Secy., J. F. Wilson, P. O. box 333.
NEW YORK RAILROAD CLUB.
Dec. 17. "The Relation of Track to Traffic on American and Foreign Railways," by E. E. Russell Tratman. Secy., W. W. Wheatly, 168 Montague St., Brooklyn.
TACOMA SOCIETY OF CIVIL ENGINEERS AND ARCHITECTS.
Dec. 18. Secy., 201 Washington Bldg., Tacoma, Wash.
CHICAGO ELECTRICAL ASSOCIATION.
Dec. 18. "Decorative Lighting," by E. J. Jenness. Secy., J. R. Cravath, 810 Old Colony Bldg.
ENGINEERS' CLUB OF COLUMBUS.
Dec. 19. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF MINNEAPOLIS.
Dec. 21. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
Dec. 31. Secy., C. H. McLeod, Montreal, Can.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
Jan. 1. Secy., O Von Geldern, 819 Market St, San Francisco, Cal.
WESTERN SOCIETY OF ENGINEERS.
Jan. 6. Secy., N. L. Litton, Monadnock Block, Chicago.
CENTRAL RAILWAY CLUB.
Jan. 8. Secy., H. D. Vought, Buffalo "Courier," Buffalo, N. Y.
RAILWAY SIGNALING CLUB.
Jan. 12. Secy., Geo. M. Basford, The Rookery Bldg., Chicago.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
Jan. 12. "Some Problems in Street Railroading," by C. H. Short. Secy., F. A. Colburn, Case Library Bldg.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Jan. 21. Kimball House, Atlanta, Ga. Secy., F. A. Charpiot, Macon, Ga.
NATIONAL ASSOCIATION OF MANUFACTURERS.
Jan. 26, 27, 28. Annual meeting in Philadelphia. Secy., E. P. Wilson, Cincinnati, O.
AMERICAN INSTITUTE OF MINING ENGINEERS.
Feb. 16. At Chicago, Ill. Secy., R. W. Raymond, 13 Burling Slip, New York city.

## CONSTRUCTION NEWS.

### CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

| Bids to be opened. | Work. | Place. | See Eng. News. |
|---|---|---|---|
| Dec. 3. | Pier, Ward's Island, | New York, N. Y. | Nov. 26 |
| Dec. 3. | Steel pocket dump, | New York, N. Y. | Nov. 26 |
| Dec. 3. | Water bonds, | Ligonier, Pa. | Nov. 26 |
| Dec. 4. | Canal work (4 contracts), | Albany, N. Y. | Nov. 26 |
| Dec. 4. | U. S. building work, | Baton Rouge, La. | Nov. 26 |
| Dec. 4. | Removal of snow and ice, | New York | Nov. 26 |
| Dec. 4. | Swing-bridge span, | Green Bay, Wis. | Nov. 19 |
| Dec. 5. | Electric wiring, | Buffalo, N. Y. | Nov. 19 |
| Dec. 7. | Asphalt paving, | Johnstown, N. Y. | Nov. 19 |
| | Advertised, Eng. News, Nov. 19 and 26. | | |
| Dec. 7. | Iron bridge (60 ft.), | Lisbon, N. Dak. | Nov. 19 |
| Dec. 7. | Engines, castings, etc., | New York, N. Y. | Nov. 26 |
| Dec. 7. | Steel bridge, | Columbus, Miss. | Nov. 26 |
| Dec. 7. | Water bonds ($20,000), | Miller's Falls, Mass. | Nov. 26 |
| Dec. 7. | School building, | New Orleans, La. | Nov. 26 |
| Dec. 7. | Pipe sewer, | Albany, N. Y. | Dec. 3 |
| Dec. 7. | Pipe sewer, | Jersey City, N. J. | Dec. 3 |
| Dec. 7. | Macadamizing, etc., | Arlington, Va. | Dec. 3 |
| Dec. 7. | Bridge, | Oakland, Cal. | Dec. 3 |
| Dec. 7. | Bonds, | Syracuse, N. Y. | Dec. 3 |
| Dec. 8. | Brick and pipe sewers, | Buffalo, N. Y. | Dec. 3 |
| Dec. 8. | Sewers, | Long Island City, N. Y. | Dec. 3 |
| Dec. 8. | Road bonds, | Long Island City, N. Y. | Dec. 3 |
| Dec. 8. | Cement (4,000 bbls.), | New York, N. Y. | Dec. 3 |
| Dec. 8. | Reservoir, dam, etc., | New York | Nov. 26 |
| Dec. 9. | Electric light plant, | Pittsburg, Pa. | Nov. 26 |
| Dec. 9. | Water bonds ($20,000), | Rockville, Md. | Nov. 19 |
| Dec. 9. | Public lighting, | Cleveland, O. | Nov. 19 |
| Dec. 9. | Hospital building, | Los Angeles, Cal. | Oct. 15 |
| Dec. 9. | Gun carriages (12), | Washington, D. C. | Nov. 12 |
| Dec. 9. | Heating, and ventilating, | Baltimore, Md. | Dec. 3 |
| Dec. 9. | City building work, | New York, N. Y. | Dec. 3 |
| Dec. 9. | Conservatory, | Chicago, Ill. | Dec. 3 |

Dec. 9. Bridge, Salinas, Cal. .....Dec. 3
Dec. 9. Fire hose, New York, N. Y. .....Dec. 3
Dec. 9. Canal improvements, Albany, N. Y. ....Dec. 3
Dec. 10. Filter plant, Pittsburg, Pa. .....Dec. 3
Dec. 10. Bonds, Buffalo, N. Y. .....Dec. 3
Dec. 10. Hospital building, San Andreas, Cal. ....Nov. 5
Dec. 10. Stone breakwater in Delaware Bay, Del...Nov. 5
Advertised, Eng. News, Nov. 5 to Dec. 3.
Dec. 10. Bridge bonds, Knoxville, Tenn. .....Nov. 26
Dec. 10. Water and swr system, Pine Ridge Ag'cy. Nov. 26
Dec. 10. Gun emplacemts, Ft. Constitution, N. H..Nov. 26
Advertised, Eng. News, Nov. 26 and Dec. 3.
Dec. 11. Dike work, Evansville, Ind. .....Nov. 19
Dec. 11. Wooden protection crib, Cleveland, O. ..Nov. 19
Dec. 11. Asphalt paving, Niagara Falls, N. Y.....Dec. 3
Advertised, Engineering News, Dec. 3.
Dec. 11. City building, New York, N. Y. .....Dec. 3
Dec. 12. Grain elevator, Galveston, Tex. .....Dec. 3
Dec. 12. Gun emplacements, Portland, Me. .....Nov. 26
Advertised, Eng. News, Nov. 26 and Dec. 10.
Dec. 12. Barbed wire fence (7 mls.), Helena, Mont..Nov. 26
Dec. 14. Water bonds ($150,000), Painesville, O..Nov. 26
Dec. 14. County jail, Hamilton, Ohio .....Nov. 26
Dec. 14. Sewers, Baltimore, Md. .....Dec. 3
Dec. 14. County building, Detroit, Mich. .....Dec. 3
Dec. 15. School building, Buffalo, N. Y. .....Dec. 3
Dec. 15. Town hall bonds, Brattleboro, Vt.....Dec. 3
Dec. 15. Bonds ($78,760), New Brunswick, N. J...Nov. 26
Dec. 15. Artesian well, Sheldon, Ill. .....Nov. 26
Dec. 15. Gas works, National Soldiers' Home, Va..Nov. 26
Dec. 15. School building, Avoca, Iowa.....Nov. 26
Dec. 15. Grain elevator, Galveston, Tex. .....Nov. 26
Dec. 15. Public lighting, New York, N. Y.....Nov. 26
Dec. 15. Water-works, Dothen, Ala. .....Nov. 19
Dec. 15. Pumping engine, Kansas City, Mo. .....Nov. 19
Advertised, Eng. News, Nov. 19 and 26.
Dec. 16. Plumbing, etc., Mansfield, Ohio .....Dec. 3
Dec. 16. Rock for jetties, St. Augustine, Fla. ....Dec. 3
Advertised, Eng. News, Dec. 3 and 10.
Dec. 17. Water bonds ($48,000), Asbury Park, N.J..Dec. 3
Dec. 17. Dredging, New London, Conn. .....Nov. 19
Advertised, Eng. News, Nov. 19 to Dec. 10.
Dec. 16. U. S. building work, Pueblo, Colo.....Nov. 26
Dec. 18. U. S. building work, Allegheny, Pa. ....Nov. 26
Advertised, Eng. News, Nov. 26 and Dec. 3.
Dec. 18. Tower and tank, at Port Royal, S. C....Nov. 26
Dec. 18. Water pipe, Cleveland, Ohio .....Nov. 26
Dec. 18. Light plant, Frankfort, Ind. .....Nov. 19
Advertised, Eng. News, Nov. 19 to Dec. 3.
Dec. 18. Electric lighting, Pittston, Pa. .....Dec. 3
Dec. 19. Hire of dredging plant, Mobile, Ala.....Nov. 19
Advertised, Eng. News, Nov. 19 to Dec. 10.
Dec. 19. Lighting fixtures, Auburn, Cal. .....Nov. 12
Dec. 20. Metal work (18 beacons), New Orleans, La..Nov. 26
Dec. 21. Sewer construct'n, Waukesha, Wis.....Nov. 26
Dec. 21. Bridge, near Manzanola, Colo. .....Nov. 26
Advertised, Engineering News, Nov. 26.
Dec. 21. Dredging, Grand Rapids, Mich. .....Dec. 3
Dec. 22. Street railway, Hamilton, Ohio .....Dec. 3
Dec. 22. Jetty at Coquille River, Ore. .....Nov. 26
Advertised, Eng. News, Nov. 26 to Dec. 10.
Dec. 22. Heating, etc., Port Townsend, Wash. ....Nov. 19
Dec. 23. Dredging in Connecticut .....Nov. 26
Advertised, Eng. News, Nov. 26 to Dec. 17.
Dec. 23. Electric light franchise, Millville, N. J...Dec. 3
Advertised, Eng. News, Dec. 3 and 10.
Dec. 24. Electric lighting, Portland, Ore. .....Dec. 3
Advertised, Eng. News, Dec. 3 and 10.
Dec. 24. Water bonds ($200,000), Cleveland, O.....Dec. 3
Dec. 26. Electric lighting, Cleveland, Ohio.....Dec. 3
Dec. 26. Officers' qrtrs, Governor's Island, N.Y.H..Dec. 3
Dec. 28. Brush and stone jetty, Wilmington, Del..Dec. 3
Advertised, Eng. News, Dec. 3 to 24.
Dec. 28. Street railway franchise, Los Angeles, Cal..Dec. 3
Dec. 30. Steel rails (150,000 tons), Sydney, N.S.W..Aug. 6
Advtsd, Eng. News, Sept. 3, Oct. 1, Nov. 5.
Dec. 31. Water and light bonds, Okolona, Miss.....Nov. 26
Jan. 1. Brick paving (6,600 sq.yds.), Athens, Pa..Dec. 3
Advertised, Eng. News, Dec. 3 and 10.
Jan. 5. Bridges (2), Atchison, Kan. .....Dec. 3
Jan. 5. Terra cotta for bridges, Milwaukee, Wis..Dec. 3
Advertised, Eng. News, Dec. 3 and 10.
Jan. 8. Wooden bridge (220 ft.), Tillamook, Ore...Oct. 8
Jan. 11. Iron bridge (280 ft.), Albany, Ga. .....Nov. 26
Jan. 14. College building, Iowa City, Ia. .....Nov. 19
Jan. 14. County roads, Eureka, Cal. .....Dec. 3
Jan. 14. Steel lining for jail, Roseburg, Ore.....Dec. 3
Jan. 14. Repairing wood bridge, Roseburg, Ore....Dec. 3
Jan. 15. Steel or wood bridge, Silver City, Idaho...Dec. 3

## RAILWAYS.

### East of Chicago.

ASHLEY, KENDALLVILLE & PERU.—A press dispatch from La Porte, Ind., says that it is announced that the construction of this road, which will be built by Detroit capitalists, will be begun at once. Application has been made for a charter and following the completion of the survey which has been partially made, the laying of the rails will begin. The line will be built from Ashley, near the Michigan line, to Chili, Ind., where connection will be made with the Wabash system of which this road will be a diverging line.

BENTON HARBOR & SOUTHEASTERN.—It is stated that this railway is now under construction and will be ready for service by March, 1897. The present line will run between Benton Harbor, Mich., and Nappanee, Ind., and as soon as the Cincinnati, Union City & Huntington R. R. is built to Huntington it is intended that a line will be constructed from that place to Nappanee, a distance of 35 miles, via Warsaw and South Whitley, and the two roads will be consolidated. The work of construction is being vigorously pushed on both lines. It is believed that the Baltimore & Ohio is behind the scheme.

BELLEFONTE CENTRAL.—F. H. Thomas, Supt., Bellefonte, Pa., writes us that the extension to Pine Grove Mills, from Struble's Station, was commenced in August, 1894, and three miles graded; work was then suspended on the line until Aug. 18, 1896, when the track was laid as far as graded and the grading on the remaining distance commenced; the extension, four miles in length, will be completed and ready for business about Dec. 15. The grading was done by the company's men. Stations are as follows: Struble's to Bloomsdorf, two miles; Bloomsdorf, to Pine Grove Mills, two miles. Pres., Robt. Frazer, Philadelphia.

BLOOMINGTON COAL.—A dispatch from Reynoldsville, Pa., states that this company, of which ex-Senator Peale is president, is making preparations to open up the coal fields at Rathmel, near here, which it leased from Tuller, Schugars & Co. some time ago. The field is about 400 acres in extent. A crew of men is at work grading and clearing for the new railway branch, two miles long, which will connect with the Reynoldsville & Falls Creek R. R. at Rathmel.

CENTRAL MICHIGAN.—J. W. Boynton, Pres., Grand Rapids, Mich., writes us that the Central Michigan and the Michigan & Ohio Belt Line railway companies are actively constructing a line of railway from Grand Haven, Mich., through portions of Michigan and into the state of Ohio to connections with the Hocking Valley and the Jackson county coal mines, passing through Grand Rapids, Gun Lake, Prairieville, Battle Creek, Burlington, Cold Water, California, Camden, Pioneer and Napoleon, Ohio; together with transfer car ferries, carrying freight trains through to Grand Haven and to Milwaukee, with terminals, side tracks and belt line around Milwaukee. The company has its terminals at Milwaukee, Grand Haven, Battle Creek and Cold Water secured. Its line of 225 miles of road, properly surveyed and located, with 200 miles of right of way secured; and 160 miles of its road bed substantially graded. It is proposed to continue the construction of this road and tracklaying in the early spring, the balance of this line ungraded is being graded now, and will continue during the coming winter. The officers are: Pres., J. W. Boynton; Secy., M. C. Dority; Ch. Engr., C. M. Rich, all of Grand Rapids, Mich., where the general offices are located.

CHICAGO, BLUFFTON & CINCINNATI.—This company was incorporated Nov. 23 with a capital stock of $121,300. The road is to run from Union City, Ind., through the counties of Randolph, Jay, Blackford, Wells, Huntington, Whitley, Kosciusko and Elkhart, to a point on the Baltimore & Ohio road, near Milford Junction. The directors are W. F. Short, N. W. Bliss, W. S. Walker, A. L. Sharpe, E. G. Short, W. R. Trasher and Hugh Dougherty.

DETROIT & MACKINAC.—A press report says that surveyors have gone in from Omer, Mich., on the Detroit & Mackinac Ry., to work towards Au Gres and thence to Point Lookout, a distance of from 13 to 15 miles. Point Lookout or Sand Point is a summer resort, patronized largely by Saginaw and Bay City, Mich., people. The people of Au Gres wish the Detroit & Mackinac to build a branch to that place and the resort, and the company will consider the advisability of extending the line. The right-of-way has been acquired a portion of the distance, and a bonus has been subscribed by Au Gres people. Ch. Engr., D. J. Casey, Bay City, Mich.

MAINE CENTRAL.—A press report from Norway, Me., states that the officials of the Maine Central have under consideration the laying of a branch road from Mechanic Falls to Norway, next season. Asst. Engr., G. F. Black, Portland, Me.

PHILADELPHIA & READING.—It is stated that, following up its determination to abandon the Little Schuylkill division, between East Mahanoy tunnel and Port Clinton, Pa., the Philadelphia & Reading Co. has started a force of 300 men at work laying a branch road to connect the tracks of the Reading and Pennsylvania roads at Wiggans, a mining village about two miles below Mahanoy City, Pa. This connection will give to the Reading a through passenger and freight line to Williamsport, independent of the route over the Little Schuylkill.

QUEEN ANNE'S.—I. W. Troxel, Ch. Engr., Baltimore, Md., writes us that the projected length is 60 miles through Queenstown and Denton, Md., and Greenwood and Milton, Del. Thirty-five miles will be in operation by Jan. 1, 1897. The contractors are at work on the last 25 miles, and all but two miles of track on the first section is laid. Pres., Wm. H. Bosley, Baltimore, Md.

VERMONT.—The Vermont legislature has granted charters to the following companies, noted last week: White River Valley R. R., Burlington & Grand Isle R. R., Copperfield R. R., Nulhegan River R. R., Benson & Putnam R. R., Rutland & Montpelier; also to the Rutland Tidewater R. R. Co. and to the Orleans & Essex R. R. Co.

### Southern.

BALTIMORE & GUNPOWDER.—The Baltimore (Md.) "Sun" says that Col. Charles B. McClean, Engr. Baltimore & Gunpowder Ry. Co., has presented to the county commissioners a plot of the railway which it is proposed to build along the Philadelphia road from the city limits to the Little Gunpowder River. The construction of the road is to be commenced within six months, and it is to be completed within twelve months. Col. McClean is quoted as saying that the company was ready to begin the building of the road at once.

BLACK DIAMOND CONSTRUCTION & DEVELOPMENT CO.—This company was incorporated at Wheeling, W. V., Nov. 23, with a capital stock of $5,000,000, commencing with $100,000, to acquire ownership of all street railways of Knoxville and North Knoxville, and to build railways, canals, turnpikes, etc. Incorporators: A. E. Boone, Zanesville, O.; Wm. Kirkby, Toledo, O.; W. M. Crawford, J. H. Weirick, J. A. Stout, Columbus, O. Albert E Boone, of Zanesville, O., will be remembered as the projector for the past few years of a double-track railway to connect Knoxville, Tenn., with the seaboard, to be known as the Black Diamond Ry.

BALTIMORE & OHIO SOUTHWESTERN.—This company has contracted with the Carnegie Steel Co. for 7,000 tons of 75-lb. steel rails, for immediate delivery. Engr., D. D. Carothers, Cincinnati, O.

CHARLESTON, CLENDENNIN & SUTTON.—A press dispatch from Charleston, W. Va., states that the work of building this railway, which was suspended about three months ago, will be resumed again within a week, and will be pushed as rapidly as possible till it is completed. The road is now in partial operation from Charleston to a point near Clay Court House, and rolling stock has been ordered to put this part of the line in shape for running trains regularly. The distance from Charleston to Sutton is about 110 miles along the Elk River Valley, and throughout the distance the road passes through a fine coal and timber region. Pres., J. H. Drake, Philadelphia, Pa.

EAST TENNESSEE TIMBER AND MINING.—A report from Newport, Tenn., says that this company has been organized to build a railway about 30 miles long into timber and coal property it has secured in Cocke and Sevier counties. James F. Brooks, a banker at Boston, Mass., is reported as interested.

FLOVILLA & INDIAN SPRING.—The extension of this railway from Spring to Griffin, and from Griffin to Augusta, Ga., is being considered. If this new plan can be carried out the old road bed which was graded to Griffin several years ago will be utilized, and thus reduce the expense of building the road. M. A. Lindsey, Flovilla, Ga., is interested.

LA FOLLETTE.—The Chattanooga, Tenn., "Times" announces that this railway, connecting La Follette with Jacksboro, Tenn., in the Coal Creek coal region, is now an assured success. Work on the road was inaugurated about two years ago. It was subsequently suspended, however, and for several months past no work has been done. It is stated that arrangements with Contractor George Callahan have been made, by which the work will be renewed at once. A large force of hands will be put on, and the ten miles of road now to be built will be completed in the early spring.

NORFOLK & WESTERN.—It is announced that the city council of Norfolk, Va., has granted a petition from this company, to extend its tracks several miles along Water St., and other streets in that city. Ch. Engr., W. W. Coe, Roanoke, Va.

NEW MARTINSVILLE & CLARKSBURG.—Contractor Fuccy is said to have announced that work will soon be resumed with 200 men. The line joins New Martinsville and Clarksburg, W. Va., connecting the Ohio River and the Baltimore & Ohio railways.

### Northwest.

CHICAGO, MILWAUKEE & ST. PAUL.—A press dispatch from Superior, Wis., says that this company may build a line to the head of the lake, and that arrangements are being made to purchase right of way. Ch. Engr., D. J. Whittemore, Chicago, Ill.

YANKTON & NORFOLK.—It is said that work has been begun on the so-called Yankton & Norfolk, an extension of the Wilimar & Sioux Falls, from Yankton, N. Dak., to Norfolk, Neb. N. D. Miller, ex-Ch. Engr. Great Northern, now at Yankton, has charge of operations, and he is reported to have said that he expects the line to be completed next spring.

### Southwest.

ATCHISON, TOPEKA & SANTA FE.—E. P. Ripley, Pres., Chicago, is quoted as saying that this company will immediately spend $1,500,000 in improvements. In the past year nearly $1,000,000 have been expended for improvements, the money being put into the road alone, replacing wooden bridges by substantial iron structures, and laying new steel. About $400,000 worth of new steel has been contracted for, which will be laid in the spring. The majority of this rail will be laid on the Chicago division. Ch. Engr., J. Dun, Topeka, Kan.

CENTRALIA & CHESTER.—This company, which has been grading on an extension from Evansville, Ind., to East Kaskaskia, Ill., has decided to extend the road to Chester, Ill. It is said the citizens of that city have raised the money to secure the right of way. It is thought trains will run into Chester about the first of March.

ELDORADO SPRINGS & WALKER.—It is stated that a contract has been made between the railway committee of El Dorado Springs, Mo., and the Midland Construction Co., of Des Moines, Ia., for the construction and equipment of a standard gage steam railway from El Dorado Springs to Walker, Mo., on the Missouri, Kansas & Texas Ry. The work is to begin at once. El Dorado Springs is about 95 miles southwest of Kansas City.

KANSAS, OKLAHOMA CENTRAL & SOUTHWESTERN.—It is said that this railway is to be extended. It is proposed to build a line from Cherryvale via Independence and Caney, Kan., to El Reno, Okla., and thence to some point in Texas. Col. S. M. Porter, a director of the road, has gone east to secure capital for the building of the extension.

KANSAS CITY, PITTSBURG & GULF.—Robt. Gillham, Ch. Engr., Kansas City, Mo., writes us that the projected length is 786 miles via Kansas City, Pittsburg, Siloam Springs, Stilwell, Poteau, Mena, Texarkana, Shreveport, Leesville, Lake Charles, Beaumont, and Port Arthur; 600 miles of track completed and operated; balance will be graded and ready for track in Dec. 1896. Contractors: B. Corrigan, Kansas City, Mo.; Monroe & Lee, Lawrence, Kan.; L. J. Smith, Lake Charles, La.; R. M. Quigley, Shreveport, La.; M. Tansey, Shreveport, La.; A. L. Lindsley, Lake Charles, La. Pres., E. L. Martin, Kansas City, Mo.

NATCHEZ, RED RIVER & TEXAS.—It is said that work will begin this winter on completing the line from Jonesville to Shreveport, La. At present the road only runs from Vidalia, La., to Jonesville. Pres., H. Porter, New York city.

ST. LOUIS, OKLAHOMA & SOUTHERN.—A press dispatch from Shawnee, Okla., says that the contract for building this railway, which runs from a point at or west of Claremore, Ind. Ter., to Shawnee, Okla., was signed Nov. 23. Calahan & Wogan, of Omaha, have the contract, and work will be commenced immediately after the meeting of the board of directors, which will be held Dec. 1, in Shawnee.

### Rocky Mountain and Pacific.

GREAT NORTHERN.—It is reported that this company will construct the Cascade tunnel in Washington, work to be begun at once. It will be 2½ miles long, and is to be completed in 1898.

MEXICAN INTERNATIONAL.—A dispatch from Monclova, Mex., says that after a suspension of one year, a large force of men has been put to work constructing the branch of the Mexican International R. R. from Reata Station, on that line, just south of here, to Monterey. The road will be completed and in operation in about three months, and will give the Southern Pacific and the Mexican International a direct line into Monterey.

OJAI VALLEY.—Geo. C. Power, County Surv., Ventura, Cal., writes us that the franchise for the right to construct the Ojai Valley R. R. across and on the public highways between the town of Ventura on the line of the Southern Pacific R. R., about 16 miles north to the town of Nordhoff in the Ojai Valley, was sold by the board of supervisors, Nov. 22. Capt. John Cross, of Los Angeles, is the projector, supposedly in the interest of the Southern Pacific.

## STREET AND ELECTRIC RAILWAYS.

BATH, ME.—An electric railway is proposed between Bath and Brunswick.

MONTPELIER, VT.—The legislature has granted a charter to the Montpelier & Mad River Electric R. R. Co.; also to the following companies, noted more fully in our issue of Nov. 19: Richford & Montgomery Electric R. R. Co., Western Vermont St. R. R. Co., Clyde River Electric R. R. Co.

WESTFIELD, MASS.—The Woronoco St. Ry. Co. has filed with the Westfield selectmen a petition for permission to lay tracks from Park Square eastward through Main St., and over the main highway to Springfield to the West Springfield line, where connections will be made with the line controlled by the Springfield St. Ry. Co.

CLYDE, N. Y.—Residents of this section of Wayne county are said to be forming a company to build an electric railway from Clyde to Palmyra and possibly diverge so as to take in the towns of Wolcott and Savannah.

ELMIRA, N. Y.—Gen. John E. Mulford is quoted as saying that the Watkins & Elmira Electric Ry. will be built in a short time.

JEFFERSONVILLE, N. Y.—Frank Loeber, a contractor, is said to have found New York parties who are willing to build an electric road to Jeffersonville, from Callicoon Depot or Liberty, if the localities interested will give the right of way and $25,000 or $30,000 in cash. The estimated cost of the road is $115,000.

LARCHMONT, N. Y.—It is reported that Charles Singer who owns the horse railway at Larchmont, intends to construct a trolley road in the place of the present system, and that it will be in operation before next spring. It is the intention of the promoters to get their electric power from the local electric company, of which William Murray is president. The new company may also ask for franchises to extend its road to New Rochelle and to Rye Beach.

NEW YORK, N. Y.—C. H. T. Collis, Comr. Pub. Wks., has granted a permit to the Third Avenue R. R. Co. to extend its tracks from 162d St., along King's Bridge road and Broadway to Spuyten Duyvil Creek, and to use electricity.

SKANEATELES, N. Y.—It is reported that a project is on foot to connect the city of Syracuse and this village by a direct line electric railway.

INDIANA, PA.—An electric railway is projected between Indiana and Punxsutawney, a distance of 34 miles. The estimated cost is $450,000.

PHILADELPHIA, PA.—There is a probability that the Ringing Rocks Electric Ry. Co. will extend its line to Swamp and Boyertown.

QUAKERTOWN, PA.—The Quakertown Traction Co. was incorporated Nov. 27 to build an electric railway connecting Richlandtown, Quakertown and Trumboursville. Capital stock, $100,000, commencing with $10,000. Pres., C. Taylor Leland.

WASHINGTON, D. C.—Frank C. Draue, Gen. Mgr., Takoma Park, D. C., writes us that the Baltimore & Washington Transit Co. was incorporated in 1896; capital stock, $1,000,000, nearly all subscribed. The projected length is two miles, from a connection with the Brightwood Electric Ry. of Washington, D. C., at its terminus at Takoma Park, D. C., to a pleasure park on Sligo Creek, in Prince George's county, Md. Survey completed and right of way secured. Pres., N. W. Williams; Ch. Engr., Benton G. Bolliean, Baltimore. The Montgomery Construction Co., of Baltimore City, Md., has taken the contract to build the railway to the park, and extend it when subscriptions justify to Sandy Spring, Md., a distance of 15 miles. Albert Gleason, of Washington, D. C., and T. W. Harris, of 44 Broadway, New York city, N. Y., will probably do all the work for the construction Co.

BALTIMORE, MD.—The City Passenger Ry. Co. has applied to Mayor Hooper for a permit to erect poles and string trolley wires along the route of the Blue Line of its system.

FALLS CHURCH, VA.—It is said that work on the Washington & Falls Church Electric Ry. has been resumed, and the line is now completed to East Falls Church, about one mile from the main portion of the village.

CHATTANOOGA, TENN.—The Lookout Mountain R. R. Co., controlling what is known as the Broad Gage Line, to the top of Lookout Mountain, is reported as to substitute the trolley system for steam on its road. P. F. Jones, Mgr.

EMINENCE, KY.—An electric railway is being talked of between this place and New Castle.

CHILLICOTHE, O.—J. B. Wilson, of Chicago, representing a number of western capitalists, has begun the work of securing the right of way for an electric railway from Chillicothe to Hillsboro, by way of Bainbridge. At the last meeting of council an ordinance was introduced granting the line a franchise for 25 years.

DAYTON, O.—A scheme for connecting Dayton with Xenia, Urbana, Eaton, Springfield, Hamilton and other points by electric railway lines is now being considered by capitalists here. The moving factor is the Cincinnati & Miami Valley Traction Co. The survey has commenced.

HAMILTON, O.—Bids are asked until Dec. 22 for building and operating Street Railway Route No. 3. M. O. Burns, Cy. Clk.

NORWALK, O.—The right of way has been secured for an electric railway from Sandusky to Bellevue, Monroeville and Norwalk, via North Monroeville, except through Monroeville, and it is thought there will be no trouble in securing the right of way through the latter place. The road is said to be in the hands of Clark Rude, of Sandusky, and W. W. Graham, of Norwalk, who are backed by eastern capitalists.

INDIANAPOLIS, IND.—The promoters of the American Steel Co. have filed articles of incorporation for a railway to be built on Capitol Ave., at the intersection of the tracks of the Union Ry. Co., south to the plant of the American Steel Co. The total length of the track with spurs to be 1½ miles. The directors are W. B. Leeds, D. G. Reid, J. F. Hagen, C. G. Garvey, E. J. Buffington and L. H. Gedge.

CHICAGO, ILL.—A trust deed for $3,000,000 has been filed to cover the issue of bonds by the General Electric Ry. Co., which are to be floated by J. P. Morgan & Co. Contracts for the construction of the road have been let, and work will begin by or before Jan. 1. The company will ask for the grant of 40 miles of streets, in addition to the ten miles now held by it.

PEORIA, ILL.—Contracts are said to have been let for building the East Bluff St. Ry. to Prospect. The Chicago Electric Institution Co. is one of the contractors.

STREATOR, ILL.—The street railway company's plant has closed, owing to the foreclosure of a mortgage for $160,000. C. C. Barr has been appointed receiver. The plant originally cost $250,000 and had been in operation six years. Reports state that it never paid expenses except during the first two years.

OSHKOSH, WIS.—The Citizens' Traction Co. has been incorporated to build an electric line in Oshkosh and also to connect the cities down the Fox River valley; capital stock, $225,000; incorporators: M. H. Eaton, ex-Mayor Stevens and ex-City Attorney Weed.

SUPERIOR, WIS.—The "Citizen" states that the Rapid Transit Co. of this city and the Street Ry. Co. of Duluth are beginning to plan for the establishment of an interurban street railway line between Superior and Duluth. It will be put in just as soon as the new bridge is completed, which will be next April or May.

KANSAS CITY, MO.—The Northeast Electric Ry. Co. has been incorporated with a capital stock of $250,000. Incorporators: Edmund G. Vaughan, Samuel M. Jarvis, Milton Moore and others.

LOS ANGELES, CAL.—Bids will be received until Dec. 28 for a street railway franchise on Hill and other streets. Address the city clerk.

OAKLAND, CAL.—The "Enquirer" quotes J. S. Emery as saying that the San Pablo Ave. cable line will be converted into an electric road next spring. The road will probably be extended to West Berkeley, and perhaps still further. A branch will run to the race track.

SAN FRANCISCO, CAL.—The Santa Rosa & Sonoma County Electric Ry. Co. has been incorporated. The company proposes to construct and maintain an extensive system of electric railways in Sonoma and Napa counties. The estimated length of these various roads is 70 miles. It is also proposed to construct street railways in the cities and towns of Sonoma and Napa counties. Capital stock, $1,000,000, commencing with $70,000. Incorporators: N. W. Griswold Kenwood; R. H. Warfield, John L. Boone, San Francisco; John F. Bixbe, Palo Alto; J. B. Fuller, Marysville.

SAN DIEGO, CAL.—The "Union" says that the Citizens' Traction Co. expects to inaugurate work soon on the extension of its electric line from Mission Cliff to the old Mission. It is proposed to construct an incline railway from the pavilion directly down the 200-ft. bluff to the valley, patterned somewhat after the Lowe Ry., near Los Angeles.

## ELECTRIC LIGHT AND POWER.

BARTON, VT.—The place has been granted authority by the legislature to erect an electric light plant.

BETHEL, VT.—It is stated that the legislature has granted permission to the Bethel Light Co. to build a dam.

CHESTER, VT.—The legislature has incorporated the electric lighting district.

CATTARAUGUS, N. Y.—It is stated that the construction of an electric light plant is contemplated.

GENEVA, N. Y.—It is reported that this city is considering the question of a municipal electric light plant.

NEW ROCHELLE, N. Y.—The Larchmont Electric Co. has been granted a franchise for lighting this city. It is stated that the plant will be built at once.

TROY, N. Y.—Mayor Day, of Watervliet, will probably soon appoint a committee to consider the advisability of securing a second incandescent dynamo for the electric light plant.

MORRISVILLE, N. Y.—The citizens are considering the question of rebuilding the electric light plant that was destroyed by fire lately, causing a loss of about $4,000.

CAMDEN, N. J.—Our correspondent writes us as follows in regard to the new plant of the Camden Lighting & Heating Co., described in our issue of Nov. 19: The company has purchased the Wharton Dye Wood abandoned plant at 17th and Coopers Creek in the adjoining town of Stockton and is remodelling the same into an electric light station, putting in a 500-HP. Corliss engine, new dynamos and boilers, coal wharf, etc. It will transfer the dynamos and engines in the Camden station to the new plant and use the plant for a steam heating and power plant for Camden. An ordinance to lay steam pipes in Camden streets is now pending.

MILLVILLE, N. J.—Bids are asked until Dec. 23 for the exclusive franchise for supplying this city with 100 or more arc lights for five years, as stated in our advertising columns. T. C. Wheaton, Chn. Com.

NEW WASHINGTON, PA.—Press reports state that an electric light plant is about to be constructed.

NEW WILMINGTON, PA.—It is likely that the town council of this place will soon erect an electric plant for lighting the streets and for furnishing light to private consumers. There are a large number of taxpayers who favor having the town owning its own electric plant. Only 15 or 20 arc lights will be needed at first.

MACADOO, PA.—The West Hazelton Electric Light Co. has applied for a franchise for lighting this place. T. A. Kelly, Chn. Com.; James MacDonald, Ch. Burgess.

HAWLEY, PA.—W. L. Connell, C. D. Jones and S. W. Edgar, of Scranton, have applied for a franchise for lighting this place with electricity.

NORRISTOWN, PA.—The Norristown Electric Light & Power Co. is reported to have purchased from Dean & Mitchell, for $8,000, an acre of land along the Schuylkill River on which a power house, with improved machinery, will be erected.

PITTSTON, PA.—Bids are asked by the light and water committee until Dec. 18 for lighting this city with electricity.——The council has passed a resolution calling for an election to vote on the question of issuing bonds for constructing a city electric light plant.

SPRINGFIELD, TENN.—It is probable that an election will soon be held to vote on the subject of building an electric light plant, according to reports. Frank Bell is interested.

BUCYRUS, O.—John A. Schaber and J. Niman are reported to have been granted a franchise for lighting this city with electricity, the plant to be completed next summer.

CLEVELAND, O.—Bids are asked until Dec. 26 for furnishing, lighting, etc., 500 electric lights for one year from Jan. 1; check, $10,000. D. E. Wright, Dir. Pub. Wks.

LAKEWOOD, O.—Bids were opened Nov. 24 for constructing an electric plant of 57 arc lights. W. F. Closse, Clk.

NEWARK, O.—It is reported that the council proposes to build an electric light plant, the building to be 80 × 50 ft.

PERU, IND.—A fire Nov. 22 partially destroyed Shirk & Miller's electric light plant, causing $2,500 loss, which is covered by insurance, according to reports.

GRAND RAPIDS, MICH.—Press reports state as follows: This city is to have a municipal lighting plant. Two years ago the people voted to issue bonds for that purpose, but the superior court declared them illegal on technical grounds. The case is now in the supreme court. The council proposes to provide against a possible adverse decision, however, and the city attorney has been authorized to draw up an amendment to the charter providing that the council have power to issue the bonds and another amendment creating a lighting commission to operate the plant. The contract with the electric light company expires about Oct. 30, 1897.

THREE OAKS, MICH.—An election was held Nov. 30 to vote on the question of issuing bonds for constructing an electric light plant and water-works, the latter being now under construction.

UNION CITY, MICH.—It is stated that this place is about to improve its electric light plant.

CARBONDALE, ILL.—An electric light plant for this place is proposed, according to reports.

HARTFORD, WIS.—We are informed that Portz Bros. are now securing estimates for erecting an electric light plant, and are also canvassing the field to ascertain the amount of business available. A. J. Portz, Hartford, can be addressed.

ALBERT LEA, MINN.—The Albert Lea Electric Co. has filed an amendment to its articles of incorporation by which the capital stock is increased from $50,000 to $100,000.

HEMPSTEAD, TEX.—Press reports state that Col. W. H. Dickerson, of Hempstead, is securing subscribers for electric light plant and water-works, which is to be built by Col. L. A. Ellis. The citizens are to grant a bonus of $2,500 and take 500 lights.

FORT WORTH, TEX.—It is stated that the Standard Light & Power Co. is to spend $40,000 in erecting additions to its plant.

PORTLAND, ORE.—Bids are asked by the committee on street lighting until Dec. 24 for lighting the streets with arc and incandescent lights for two years, as stated in our advertising columns. A. N. Gambell, Audr.

AZUSA, CAL.—The California Construction Co., San Francisco, Cal., has been awarded the contract for building 17,000 ft. of tunnel for the power works on the San Gabriel River, at $120,000. The works will cost about $750,000. The work was described in our issue of Nov. 5. Engr., E. C. Balch, 28 Baker Block, Los Angeles, Cal.

NEW COMPANIES.—White River Power Co., White River, Vt.

Westminster Electric Co., Westminster, Vt.

Keweah Power & Water Co., Phoenix, Ariz.; to construct canals, reservoirs, etc.; $300,000; John A. Fritle, George Hanna, E. C. Ware, O. E. Ainsworth, A. G. Wishon, all of Los Angeles, Cal.

Cupples' Station, Light, Heat & Power Co., St. Louis, Mo.; $50,000; Samuel Cupples, R. H. Brookings, Edward S. Pierce.

Astoria Electric Light, Heat & Power Co., Astoria, Ill.; $12,000; George Scripps, A. Scripps, John D. Atkinson.

Carlisle Electric Light, Heat & Power Co., Carlisle, Pa.; $1,000; Treas., M. P. Quinn, Pottsville, Pa.

Mother Lode Electric Co., San Francisco, Cal.; $200,000, with $50,000 paid in; to construct an electric plant on the Stanislaus River, Calamras county; John C. Jeus, Belmont, Cal.; Alex. Woodside, Theo. Frolich, G. Gall, of San Francisco; W. J. Woodside, Belfast, Ireland.

Pine Bluff Power & Transit Co., Pine Bluff, Ark.; $100,000, with $275 paid in; J. B. Trulock, D. C. Bell, W. H. Langford, S. Bloom, J. B. York and M. A. Austin.

## BRIDGES.

LITTLETON, N. H.—The legislature of Vermont has granted a charter to the Littleton Bridge Co.

NORTH SANDWICH, N. H.—It is reported that this place is to have a new steel bridge.

MONTPELIER, VT.—The legislature has authorized this city to issue bonds for constructing a bridge.

VERNON, VT.—The legislature has passed a bill granting this town permission to build a bridge over the Connecticut River.

HARTFORD, CONN.—Edwin D. Graves, Engr. Connecticut River Bridge and Highway Commission, has submitted a report on the proposed repairing of the three bridges. The construction of a permanent bridge was also discussed.

NORWALK, CONN.—The selectmen have voted to reconstruct the bridge at the turnpike by building a stone arch at a cost of about $1,500.

BROOKLYN, N. Y.—Plans and specifications have been prepared for the Brooklyn tower of the new East River bridge, and it is reported that bids for the work will soon be asked. Engr., L. L. Buck.

BUFFALO, N. Y.—The council has directed the board of public works to prepare plans and specifications and to advertise for bids for constructing an iron bridge and abutments over Cazenovia Creek at Cazenovia St. M. S. Hubbell, Cy. Clk.

NEW YORK, N. Y.—Charles Swan, Secy., the New York and the New Jersey Construction companies, is quoted as stating that a contract was closed Dec. 1 with the Union Bridge Co., 1 Broadway, New York, for building the bridge over the Hudson River at a cost not to exceed $25,000,000, the Union Bridge Co. agreeing to give a bond of $1,000,000 for the faithful performance of the contract. The bonds for the construction of the bridge will be soon offered.

SPRINGVILLE, N. Y.—The Buffalo, Rochester & Pittsburg R. R. Co. will build a heavy bridge over Cattaraugus Creek near this place. It will be 150 ft. high. H. Ware, Roadmaster, Springville; Wm. E. Hoyt, Ch. Engr., Rochester.

PITTSBURG, PA.—Geo. W. Wilson, Max G. Leslie, R. H. Douglas, Geo. H. Stengel, Harvey A. Lowry and Dr. John P. Sterrett have been appointed a committee by the council to make arrangements for the construction of new bridges at Penn, Shady and Highland Aves., to cost about $34,000, of which amount the Consolidated Traction Co. is expected to pay $20,000.

ELKTON, VA.—It is said that bids will soon be asked by J. G. H. Miller and Geo. R. Eastham for constructing a $7,500 iron and steel bridge at this place.

MANCHESTER, VA.—The Chesapeake & Ohio Ry. Co. is making arrangements for reconstructing the bridge at this place, and for making other improvements to its line here. F. B. Isaacs, Engr., Free Bridge Comr., can be addressed.

GLENDON, N. C.—The Glendon & Gulf Ry. Co., now building an extension of its line, over 100 miles, to Charlotte, N. C., from Glendon, Chatham county, will, during the next year, contract for several iron bridges across streams, and also for considerable trestle work. One bridge across Deep River, has just been completed. J. L. Tull, Ch. Engr., Glendon.

BIRMINGHAM, ALA.—A wagon bridge near Ensley City fell Nov. 21, causing the death of one man. The span was 63 ft. long and had been completed about a week. P. S. Milner, County Surv., Birmingham.

YOUNGSTOWN, O.—David M. Wise, County Engr., writes us that plans are partly prepared for the three proposed bridges over the Mahoning River, and bids will probably be received some time next year.

ST. PAUL, MINN.—The city engineer has prepared plans for a steel bridge over the track of the Chicago, Milwaukee & St. Paul Ry. Co. at Summit Ave. The structure will be 60 ft. long and 100 ft. wide and is estimated to cost $28,500. This bridge is to be constructed by the railway company. L. W. Rundlett, Cy. Engr.

BUTTE, MONT.—It is stated that Yellowstone county will have another free wagon bridge, a proposition to bond the county for $16,120 having been approved. The new bridge will be between Park City and Laurel.

HELENA, MONT.—The Northern Pacific Ry. Co.'s steel bridge, near Trout Creek, was destroyed by the storm two weeks ago. Other bridges along this line were also damaged, according to reports. E. J. Pearson, Div. Supt., Helena.

MISSOULA, MONT.—O. E. Peppard & Co., of Missoula, are reported to have been awarded the contract for constructing a new bridge over the Yellowstone River, at Big Timber, at $8,350.

ATCHISON, KAN.—Bids are asked until Jan. 5 for reconstructing two bridges in Atchison county, according to reports. C. H. Krebs, County Clk., Atchison.

DENVER, COLO.—The construction of a new bridge over the Platte River at 15th St. is being agitated by the supervisors and the board of public works. Supervisor C. S. Phister can be addressed.——The board of

public works on Dec. 21 proposes to advertise for bids for the construction of the 14th St. viaduct. Plans and specifications have been prepared for this structure which will be about 3,480 ft. long and is to cost about $200,000. E. Monash, Pres., T. J. Milner, Ch. Engr.——The Paonia Bridge Co. has been incorporated by T. C. Wand, H. L. Curtiss, F. H. Bullen and N. L. Hollister, to build a bridge over the North Fork of the Gunnison River, in Delta county. Capital stock, $6,000.

GLENWOOD, COLO.—It is reported that the county commissioners Nov. 25 decided to build a bridge across the Grand River at the Roderick Ferry. The contract will be let soon after December, when the plans are to be submitted to the board. The cost of the bridge will be about $10,000.

BOONVILLE, MO.—The secretary of war is reported to have approved the plans of the proposed wagon and motor bridge across the Missouri River at this place. Committees have been appointed to raise the stock. The estimated cost of the bridge is about $200,000. The plans were said to have been prepared by A. J. Tullock, Proprietor of the Missouri Valley Bridge & Iron Works, Leavenworth, Kan. Dr. Wm. Mittelbach and W. F. Switzler, of Boonville, can be addressed.

ST. LOUIS, MO.—The construction of a bridge at Clark Ave., for which the railway companies are asked to contribute about $150,000, is being agitated.——It is proposed to appropriate $5,000 for repairing the bridges at 12th and 14th Sts.

ROSEBURG, ORE.—Bids are asked until Jan. 14 for repairing the entire wooden bridge and approaches over the South Umpqua River, at this place. The work is to be completed about Aug. 1, 1897. A. F. Stearns, County Judge.

OAKLAND, CAL.—Bids are asked until Dec. 7 for building a bridge over Arroyo Valley Creek, about five miles from Livermore. Frank C. Jordan, Clk. Supervisors.

SALINAS, CAL.—Bids are asked until Dec 9 for constructing a bridge over the Salinas River, near Gonzales Crossing, according to reports. A. Wideman, Road Comr., Gonzales, Cal.

SAN BERNARDINO, CAL.—It is stated that this city has decided to build a 60-ft. bridge over Town Creek at C St.

SILVER CITY, IDAHO.—Bids are asked until about Jan. 15 for constructing a one-span steel or wooden bridge at Hot Springs in the Bruneau Valley, according to reports. E. L. Ballard, Clk.

## BUILDINGS.

FREEPORT, ME.—J. C. Stevens, 185 Middle St., Portland, Me., is reported to have prepared plans for a new Baptist church for this place, 110 ft. long.

BRATTLEBORO, VT.—Bids are asked by the town clerk until Dec. 15 for the purchase of $35,000 of 4% town hall bonds.

BOSTON, MASS.—The Geo. A. Fuller Co., 1027 Marquette Bldg., Chicago, Ill., and 160 Fifth Ave., New York, N. Y., is reported to have been awarded the contract for erecting a 10-story brick and stone office building at Devonshire St. and Congress Place for the Brazier Building Trust Co., to cost $250,000. Arch., Chas. Gilbert, Endicott Bldg., Boston.

LENOX, MASS.—Carrere & Hastings, 44 Broadway, New York, are reported as preparing plans for a $200,000 residence in this city, for Giraud Foster, 143 Liberty St., New York.

SOMERVILLE, MASS.—Plans have been submitted for a new city building on Central Hill to cost about $50,000. E. W. Bailey, Cy. Engr.

WORCESTER, MASS.—Fuller, Delano & Co., 452 Main St., Worcester, are preparing plans for a $150,000 masonic temple for this city, according to reports. Wm. A. Lytle, Walker Bldg., Chn.

NEWPORT, R.I.—Quimby & Broome, 99 Nassau St., New York, are said to be preparing plans for a costly 5-story brick residence in this city, to be 300 × 120 ft.

BROOKLYN, N. Y.—B. J. Bussman, of Hancock, N. Y., was the lowest bidder Nov. 21, at $148,900, for the construction of the drill hall for the 47th Regiment.——Levering & Garrigues, 552 W. 23d St., New York, have been awarded the contract for the iron work for the two warehouses for Burwell & Lee, 216 State St., Brooklyn, to cost $274,000. Arch., F. T. Camp, 114 Nassau St., New York.

BROOKLYN, N. Y.—Money is being secured for the construction of a Swedish hospital to cost $45,000. Archs., Dahlander & Hedman, Arbuckle Bldg., Brooklyn; E. T. Holmes, 18 Hamilton Ave., is interested.——M. Gibbons & Son were the lowest bidders Nov. 27 for building a training stable for the fire department at $34,973. Wm. C. Bryant, Comr. Dept. of Fire.

BUFFALO, N. Y.—Bids are asked until Dec. 15 for erecting a 17-room school building on 7th St. R. G. Parsons, Secy. Dept. Pub. Wks.——A company with a capital stock of $100,000 is being formed to build a theatre at 327 Main St. Louis H. Eckert, George More and W. S. Cleveland, of Cleveland's Minstrels, are the organizers. Plans have been drawn for a theatre to seat 3,000 people.——St. Boniface's Congregation will build a 4-story brick school on Mulberry St. G. Kuch, 581 Fillmore Ave., Arch.——Pentecost & Byrnes have prepared plans for residences aggregating in cost $19,500.

BUFFALO, N. Y.—Metzger & Greenfield, White Bldg., Buffalo, have prepared plans for a $40,000 church building for the Richmond Ave. M. E. Church.

GOVERNOR'S ISLAND, N. Y. H.—Bids are asked until Dec. 26 for constructing a double set of officers' quarters. Maj. W. S. Patten, Q. M., Governor's Island.

NEW YORK, N. Y.—Bids are asked by the fire department, 157 E. 67th St., until Dec. 9 for repairing two fire department buildings.——J. R. Thomas, 160 Broadway, is preparing final plans for a new wing for the penitentiary on Blackwell's Island to contain 468 cells, and to cost about $325,000, after which the department of correction will advertise for bids for the work.——The National Academy of Design has appointed a committee to secure a site for a new building. It is said that about $517,000 has been subscribed for the work. This committee will also receive plans for the new academy building. Thomas W. Wood is chairman of the committee and James H. Hart, J. Carroll Beckwith and Geo. H. Smillie are among the members.——Plans for the new building devoted to botany, to be erected on the land recently appropriated by the city for the New York Botanical Garden in Bronx River Park, were filed Nov. 25. The plans call for a 3-story and basement brick and terra cotta building, with a steel skeleton, having a frontage of 308 ft., and a depth of 115 ft., at one end of the building, and 87 ft. at the other end. Robert W. Gibson, 18 Wall St., Arch., estimates the cost of construction at $250,000. The city and the New York Botanical Garden are the owners in fee, and the commission of the New York public parks is to act as trustee. The building will be situated south of the Southern Boulevard and southwest of the Bedford Park railway station.——Heins & La Farge, Temple Court, have prepared plans for new dormitories for Columbia College to cost about $1,000,000. The structure will accommodate 920 students.——Thos. Graham, 1236 Madison Ave., is said to be preparing plans for a 6-story house on Lenox Ave., to cost $200,000, for F. J. Schnugg, 78 E. 96th St.——Chas. T. Wills, 156 Fifth Ave., has the contract for erecting a 12-story building at 30 and 32 Elm St., for the New York Life Insurance Co.——W. A. & F. E. Conover, 253 Broadway, have the contract for removing the old building at 290 to 294 Broadway for the 23-story building to cost $1,000,000 for R. G. Dun & Co.; Archs., Harding & Gooch, 253 Broadway.——Plans have been filed by Chas. Bowen, 305 W. 85th St., for a 6-story brick building, to cost $145,000; Arch., H. S. Styne Harde, 489 Fifth Ave.

NEW YORK, N. Y.—Bids are asked until Dec. 11 for constructing temporary quarters at the city prison. Robt. J. Wright, Comr. Dept. of Correction, 148 E. 20th St.——Plans have been filed by Isaac V. Brokaw, 1 East 79th St., for a 11-story brick hotel, ballroom and stable at 5th Ave. and 44th St., to cost $700,000. The structure will be 225×116 ft., and will contain a ballroom 90×80 ft.

SYRACUSE, N. Y.—Contracts are reported as being awarded for erecting a 6-story brick building on East Water St. for D. Mason & Co.; Archs., Benson & Brockway, Syracuse, and 55 Broadway, New York.——The question of constructing a new county court house has been laid over by the supervisors until next year.

PATERSON, N. J.—S. Burradge Reed has prepared plans which have been accepted for a new 4-story court house in this city. The structure will be 168 × 150 ft., and is estimated to cost about $275,000, although the court house commissioners have an appropriation of $350,000 for the work, the remainder being reserved for furnishing the building, etc.——The Erie R. R. Co. and the city officials are discussing the question of a new passenger station at this point.

ALLEGHENY, PA.—Rose & Fisher, of Allegheny, have been awarded the contract for constructing a 2-story iron and brick school building on Lydia St. at $31,000.——Philip T. Kelley, of Philadelphia, has purchased $120,000 of school bonds, which are to be used for erecting and furnishing the school building now under construction, but not the structure mentioned above.——Harvey Childs has been granted a permit to erect a 2-story dwelling on Bidwell Ave. to cost $37,000.

HARRISBURG, PA.—We are informed that Schermerhorn & Reinhold, 430 Walnut St., Philadelphia, have prepared plans for a large hotel near Harrisburg; estimated cost $100,000.

HOMESTEAD, PA.—Wm. Miller & Sons, of Pittsburg, have been awarded the contract for building at a cost of about $250,000 the new library, music hall and clubhouse presented to the city by Andrew Carnegie. The Pittsburg Bridge Co. will furnish the steel for the roof, but all the other steel will be furnished by the Carnegie Steel Co. The building will be 226×98 ft. Archs., Alden & Harlow, Vandegrift Bldg., Pittsburg; C. M. Schwab, Supt. Homestead Steel Works, and R. A. Franks, Secy. Butler & Pittsburg R. R. Co.

PHILADELPHIA, PA.—The Wylie Presbyterian Church, Rev. T. W. J. Wylie, pastor, 1824 Wylie St., proposes to erect a new edifice to cost $150,000.——The "Press" is reported as about to erect an office building; Arch., T. B. Chandler, 328 Chestnut St.——Keen & Mead, 13th and Walnut Sts., are said to be preparing plans for a 10-story office building for W. Spence Harvey, of this city.

PITTSBURG, PA.—T. B. Chandler, 328 Chestnut St., Philadelphia, is reported as preparing plans for a $200,000 church structure for the Third Presbyterian Church.

SCOTLAND, PA.—The Pennsylvania Soldiers' Orphans Industrial School, Scotland, will erect a brick engine and pump house, to cost about $10,000. Also a blacksmith shop, 20 × 30 ft.; Arch., Thos. P. Lonsdale, 4th and Walnut Sts., Philadelphia.

PITTSTON, PA.—The construction of a city hall is being considered by the council.

BALTIMORE, MD.—Bids will soon be received by W. T. Manning, Ch. Engr., Baltimore & Ohio R. R. Co., for erecting an addition to the Camden station. The addition will contain waiting, dining, smoking rooms, etc., and a train shed 146 × 60 ft. Alongside of this station there will also be erected another shed from which trains will leave.——Local papers state that a report will soon be submitted by Chas. A. Hook, Engr., in regard to the safety of the city college building, improvements on which are estimated to cost probably $100,000.——It is proposed to place two new passenger elevators in the city hall at a cost of $20,000.

BALTIMORE, MD.—Bids are asked until Dec. 9 for heating and ventilating school building No. 9 and annex to school No. 3. Benj. B. Owens, Inspector of Bldgs.

ATLANTA, GA.—We are informed that the following bids were received Nov. 24 for constructing a county jail and residence; L. P. Hazen & Co., Cincinnati, were awarded the contract for constructing the jail complete, to be finished by Dec. 31, 1897; A. L. Kontz, Clk. County Comrs.:

| Bidders. | Jail complete. | Without structural steel. | Structural steel only. | Prison dept. steel and iron complete. |
|---|---|---|---|---|
| M. T. Lewman & Co.[9] & Pauley Jail Bldg. Co.[1] | $207,400 | .... | .... | .... |
| Champion Iron Co.[3] | .... | .... | .... | $74,481 |
| Gude & Walker[2] | .... | $109,990 | .... | .... |
| Atlanta Mach. Works[8] | .... | .... | $28,296 | 72,500 |
| Milwaukee Br. & Ir. Co.[4] | .... | .... | 32,900 | 92,000 |
| Van Dorn Ir. Wks. Co[5] | .... | .... | 29,425 | 69,388 |
| Chas. A. Moses[6] | 199,700 | 107,000 | 27,794 | 67,850 |
| Venable Const'n Co.[3] | .... | 126,000 | 32,000 | .... |
| L. L. Leach & Son[6] | 225,000 | 116,000 | .... | .... |
| Nicholas Ittner[6] | .... | 121,360 | .... | .... |
| F. P. Heifner[6] | 207,039 | 107,024 | .... | .... |
| Stewart Iron Works[7] | .... | .... | 34,000 | 102,400 |
| Portsmouth S.S. & Ir. Co[5] | .... | .... | .... | 68,455 |
| Geo. E. Murphy | .... | 136,238 | 29,925 | .... |
| L. P. Hazen & Co.[7] | 169,661 | 112,297 | 24,045 | .... |
| W. M. Crilley[6] | 219,987 | 119,987 | 25,987 | 76,987 |
| Sneed & Co. Iron Wks.[9] | .... | .... | 34,000 | 102,400 |
| Wm. Bensil & Co.[3] | .... | 126,000 | .... | .... |
| N. J. Steel & Iron Co. | .... | .... | 41,050 | .... |
| Diebold Safe & Lk. Co.[2] | .... | .... | .... | 86,000 |
| Brown-Ketchum I. Wk.[10] | .... | .... | 31,500 | 67,850 |

[1]St. Louis, Mo.; [2]Canton, O.; [3]Atlanta, Ga.; [4]Milwaukee, Wis.; [5]Cleveland, O.; [6]Chicago, Ill.; [7]Cincinnati, O.; [8]Portsmouth, O.; [9]Louisville, Ky.; [10] Indianapolis, Ind.

DECATUR, GA.—An election will be held Dec. 3 to vote on the question of constructing a new county court-house. Press reports state that the commissioners will in a few days advertise for 60 days for bids for the work, which it is expected to complete in about eight months. Archs., Golucke & Stewart, 24½ Whitehall St., Atlanta, Ga.

ELIZABETHTON, TENN.—It is reported that arrangements are being made by the Watauga Land Co. to begin the construction of an industrial city here. A number of industrial plants are now being erected at a cost of about $3,000,000. General Dodge, of Boston, is said to be the manager.

MANSFIELD, O.—Bids are asked until Dec. 16 for plumbing and ventilating the fifth tier of cells of the Ohio State Reformatory. Arch., L. T. Scofield, 338 Erie St., Cleveland; L. F. Limbert, Pres. Bd. Mgrs.

TOLEDO, O.—Bids will soon be asked by the board of education, according to reports, for erecting a new three-story high school building to be 230 × 128 ft.; estimated cost, $125,000. Archs., Bacon & Huber, Spitzer Bldg.——It is stated that steps will soon be taken by the county commissioners toward the construction of a new jail.

SAGINAW, MICH.—The following bids were received Nov. 20 for erecting a post office building in this city:

| | | Time. |
|---|---|---|
| Alexis Gelinas, Saginaw, Mich | $91,787 | Dec. 1, '98. |
| Forster & Smith, Minneapolis, Minn. | 71,672 | 12 mos. |
| Qualmann & Heineman, Saginaw | 88,448 | 1 year. |
| Wm. C. Peake, Washington | 84,869 | 12 mos. |
| *C. W. Gindele, 144 E. Monroe St. | 67,000 | 12 mos. |
| Constable Bros., Erie, Pa | 145,482 | 312 wk. da. |
| Henry Shenk, Erie, Pa | 102,352 | 1 year. |
| J. C. Robinson, Chicago | 92,099 | 12 mos. |
| L. L. Leach & Son, Chicago | 84,000 | 12 mos. |
| Murdoch Campbell Co., Chicago | 96,869 | 12 mos. |
| Chas. A. Moses, Chicago | 75,280 | 11 mos. |
| W. C. Mueler & M. Winkler, Saginaw | 83,334 | 12 mos. |

*Awarded contract at $90,900; address Chicago.

DETROIT, MICH.—Bids are asked until Dec. 14 for constructing the Wayne county building in this city; Archs., John Scott & Co., 67 Moffat Block, Detroit; Wm. Richert, Chn. Com.; Lou Burt, Chn. County Audrs.

CHICAGO, ILL.—Bids are asked by the commissioners of Washington Park until Dec. 9 for constructing a new conservatory, to cost about $50,000, in Washington Park, at 56th St. The structure will be 450 ft. long.

CHICAGO, ILL.—A local paper of Nov. 24 states that the City Tower Co. has leased two blocks of ground from George W. Streeter, near Superior and St. Clair Sts., for a term of 15 years, from Oct. 21, 1896, and agrees to erect within two years a tower of a pattern similar to the Eiffel Tower. It is to be 1,150 ft. high, with a base of 350 ft. The total cost is estimated at $800,000. It will consist of seven stories or landings, which will be reached by 34 elevators. David R. Proctor, Pres., 144 La Salle St., Chicago; Smith C. Williams, Secy.

JOLIET, ILL.—It is reported that Jean Beauley, 1232 Michigan Ave., Chicago, is preparing plans for a 2-story building, 100 × 100 ft., for the Will County Polytechnic Institute; estimated cost, $200,000. Wm. S. Hess and Dr. C. E. Downey are said to be interested.

DUBUQUE, IA.—The Merchants' Warehouse Co. has been incorporated at Dubuque, by A. B. Stickney, Pres. Chicago Great Western Ry. Co., W. B. Conway, Robt. G. Wight, Secy. Chic. G. W. Ry., and Arnold Kalman, Vice-Pres., St. Paul, to build warehouses on the line of the Chicago Great Western Ry. for the storing of grain. Capital stock, $500,000.

ST. LOUIS, MO.—Local papers state that D. H. Burnham & Co., The Rookery, Chicago, have prepared plans for a 22-story office building at 7th and Olive Sts., for the Seventh St. Realty Co., in which J. P. Van Blarcom, of the National Bank of Commerce, and B. F. Edwards are interested.

ST. PAUL, MINN.—The elevator of the St. Paul Elevator & Warehouse Co., at Third and St. Peter Sts., is reported to have been destroyed by fire Nov. 26. There were 100,000 bushels of grain in the building. The loss is $100,000, covered by $30,000 of insurance.

EASTLAND, TEX.—It is reported that the court house at this place was destroyed by fire Nov. 20 causing a loss of $65,000.

GALVESTON, TEX.—Bids are asked until Dec. 12 for constructing a 650,000 bu. elevator for the Galveston Wharf Co.; check, $10,000; bond, $50,000. Engrs., James Stewart & Co., Commercial Bldg., St. Louis, Mo.; John E. Bailey, Secy.

GALVESTON, TEX.—Plans are reported as about completed for a new 5-story office building and union station combined, at Bath Ave. and the Strand, for the Atchison, Topeka & Santa Fe Ry. Co.

PORTLAND, ORE.—C. J. Erickson, Seattle, Wash. submitted the lowest bid at $30,700 received by Capt. W. L. Fisk, U. S. Engr., for constructing a lighthouse at the entrance to Gray's Harbor.

ROSEBURG, ORE.—Bids are asked until Jan. 14 for a steel lining and other improvements to the county jail, according to reports. A. F. Stearns, County Judge.

MONTREAL, QUE.—The Montreal Amateur Athletic Association is said to be about to offer prizes for plans for a club-house, to cost about $100,000.

MEXICO, MEX.—It is reported that the work of demolishing the Hotel de la Gran Sociedad in order to make room for the National Bank building, will soon be begun. The board of managers is waiting for the arrival from Paris of the plans.——Bids will probably soon be asked for the erection of Mexico's new Chamber of Deputies.——It is said that the Bank of London is contemplating the renovation of its building at Capuchinas and Lerdo Sts.

## WATER-WORKS.

WINTER HARBOR, ME.—C. C. Hutchings, Gen. Supt., writes us that nothing will be done in regard to water-works until another fall.

ISLAND POND, VT.—The Brighton Aqueduct Co. has been granted a charter; capital stock, $40,000; Z. M. Mansur and E. M. Bartlet are among the incorporators.

NORWICH, VT.—The Norwich Aqueduct Co. has been granted a charter by the legislature.

ROCHESTER, VT.—The Rochester fire district has been granted authority to issue bonds.

HUDSON, MASS.—B. R. Felton, Tremont Bldg., Boston, has been engaged to prepare a report and estimate of cost for a new dam and water main at this place.

IPSWICH, MASS.—It is reported that a town meeting will be held to vote on an issue of $6,000 in 30-year bonds for water extensions.

MELROSE, MASS.—This city received 14 bids ranging from 105 to 106.7249 for the purchase of $17,000 in 30-year 4% water bonds.

REVERE, MASS.—Warren Lewis, Town. Clk., writes us that this town is not contemplating water-works or electric lighting at present; town is to be included in the new metropolitan water supply district.

NEW BRITAIN, CONN.—The contract for water pipe for next season's work has been awarded to M. J. Drummond, of New York, who has furnished the pipe for several years.

BOONVILLE, N. Y.—The Stanwix Engineering Co., of Rome, has prepared plans for works at this place, estimated to cost $45,000, and an election will be held Dec. 15 to vote on an issue of bonds for the construction.

DERUYTER, N. Y.—An election will be held Dec. 8 to vote on an issue of $13,000 in bonds for water-works. At an election last February a tie vote was cast, since which time the question has been strongly agitated, according to reports.

FLUSHING, N. Y.—G. A. Roullier, Engr., has submitted a detailed estimate of the cost of a proposed standpipe with connections; stand-pipe, $15,000; foundations, etc., $2,500; connections, etc., $14,000.

MOUNT VERNON, N. Y.—The authorities of St. Joseph's Seminary, on Valentine Hill, are reported as to sink several artesian wells.

ASBURY PARK, N. J.—Bids are asked until December 17 for the purchase of $48,000 in 5% water bonds, noted last week as voted. G. H. Coffin, Supt., writes us that the plans have not yet been made for the proposed improvements.

CAPE MAY, N. J.—The council is reported as receiving bids for laying additional water mains and sewers.

MORRISTOWN, N. J.—The contract for constructing a 5,000,000-gallon reservoir, etc., for the state hospital at Morris Plains has been awarded to Coon & Mooney, of Wilkes Barre, Pa., at $15,466, according to press reports. The itemized bids were published in our issue of Nov. 19. Geo. W. Howell, Engr.

TRENTON, N. J.—The contract for constructing the new reservoir has been awarded to Lewis Lawton, 432 Hamilton Ave., Trenton, at $349,489; Chas. A. Hague, Engr., 39 Cortlandt St., New York.

DELTA, PA.—We noted Nov. 12 that $12,000 in bonds had been voted for a new reservoir. It is stated that construction will not be commenced until spring; F. M. Francis, Secy. Comrs.

McKEESPORT, PA.—The American Water-Works Co., of this city, is said to have been granted an exclusive franchise for works in the neighboring borough of Port Vue, plant to be completed by July, 1897.

MEADVILLE, PA.—Materials have been purchased and surveys are being made for a new 20-in. main from the pump house to the reservoir.

PITTSBURG, PA.—Bids are asked until Dec. 10 for furnishing and erecting a filter plant for the department of public safety; J. O. Brown, Director, City Hall.

PARKERSBURG, W. VA.—This city is considering the question of filtering its water supply from the Ohio River; John Dunbar, Cy. Engr.; R. H. Thomas, Mayor.

POINT PLEASANT, W. VA.—This town is reported as wanting to grant a franchise for works.

HAWKINSVILLE, GA.—It is stated that works will soon be constructed; S. A. Way, Mayor.

DYERSBURG, TENN.—F. H. Shepard is reported about to make extensions to the water-works plant, which he owns.

BUCYRUS, O.—Henry B. Smith, Secy. Bucyrus Water Co., writes us that the matter of building reservoir and making extensions of mains has been postponed until next year.

CLEVELAND, O.—Bids are asked until Dec. 24 for the purchase of $200,000 in 4% water bonds. H. L. Rossiter, Cy. Audr.——The following bids were received by D. E. Wright, Dir. Pub. Wks., Nov. 27, for constructing and placing in position in Lake Erie, at a point about four miles from shore, a steel inlet protection crib, filling it with concrete, stone, etc.:

| | |
|---|---|
| Van Dorn Iron Works Co., Cleveland | $104,987 |
| L. P. & J. A. Smith, Cleveland | 158,000 |
| Shailer & Schniglau Co., Chicago | 145,000 |
| D. & J. Driese | 177,000 |
| King Bridge Co., Cleveland | 237,000 |

ROYAL CENTRE, IND.—This city voted some time ago to issue bonds for water-works. It is stated that the bonds have now been sold and that the plant will be put in as soon as possible.

DETROIT, MICH.—Information in regard to a filter plant of 1,000,000 gallons daily capacity is said to be wanted by Richard E. Raseman, Arch., 38 Buhl Block.

SCOTTVILLE, MICH.—Plans are being prepared for works, according to reports, bonds having been sold for the construction.

ALTON, ILL.—The Alton Water Works Co. is reported as about to proceed with several proposed improvements, including a system of filtration.

CHICAGO, ILL.—The finance committee of the council has approved an ordinance to extend the new northwest water tunnel four miles into the lake, instead of three, at an additional expense of about $200,000; also that a 14,000,000-gallon pumping engine be purchased for the relief of the Lake View works. It is reported that the pump will be purchased of the Holly Mfg. Co., at a cost of $43,000, this being one of the pumps now a subject of litigation ordered over a year ago and almost completed.

BELLE PLAINE, IA.—A water tank at this place collapsed Nov. 16. It is probable from the report that the tank belonged to the Chicago & Northwestern Ry.

SIOUX CITY, IA.—The new 5-in. artesian well is said to be a success and it is probable that other wells will soon be sunk. L. F. Wakefield, Cy. Engr.

DULUTH, MINN.—The contract for the last three miles of 42-in. force main has been awarded to the Carroll-Porter Boiler & Tank Co., of Pittsburg. The committee to investigate the valve award submitted majority and minority reports, and no valve contract had been awarded Nov. 24.

FORT SCOTT, KAN.—The court has directed S. B. Mosher, U. S. Comr., to sell the plant of the Fort Scott Water Co. at auction. The receiver was authorized some time ago to issue receivers' certificates for $50,000 for improvements, which are now being made.

BUTTE, MONT.—James W. Forbes and others of this city are said to be organizing a company to construct a new water-works system; supply probably from artesian wells. The city is having considerable trouble with the present company on account of the condition of the water supply; F. W. Blackford, Cy. Engr.

INDEPENDENCE, MO.—Councilman E. P. Gates has completed a new water franchise and it is now being considered by the council and by Robt. Rankin, of St. Louis, of the water company. It is said to provide for five miles of new mains and 20 more hydrants.

RICHMOND, MO.—It is reported that the $45,000 in bonds, voted several months ago, are now to be sold and works constructed; W. T. Shoop, Mayor.

KIRKWOOD, MO.—Marcus Bernheimer has petitioned for an extension of time in which to construct works at this place. The project includes a plant to supply Meramec Highlands, Webster Groves, Old Orchard and other suburbs of St. Louis, and would cost over $200,000; construction should have been commenced by Nov. 24, according to the terms of the franchise.

BRYAN, TEX.—Arrangements are being made, acording to reports, to improve the water-works plant; it is stated that an air-lift pump will be put in.

HEMPSTEAD, TEX.—W. H. Dickerson is interested in a new company being organized to construct works in this city.

HILLSBORO, TEX.—This city is reported as to spend $12,000 for water-works extensions; O. J. Morris, Supt.

McKINNEY, TEX.—It is probable that works will soon be constructed at this place.

ORANGE, TEX.—There is talk of constructing works; B. C. Miller, Mayor.

PITTSBURG, TEX.—It is reported probable that water works and an electric light plant will be constructed next summer.

TRINIDAD, COLO.—At the election Nov. 25 the citizens voted 344 to 61 to issue bonds to purchase the works.

PALISADES, COLO.—Press reports state that this place will soon have water-works.

PUEBLO, COLO.—We are informed that no further steps will probably be taken in regard to extending the reservoirs for some time; plans and estimates were made about a year ago by E. W. Hathaway, Cy. Engr.; contracts for pump house and new pumps have been awarded, as recently noted.

MONTPELIER, IDAHO.—There is some talk of constructing works; no definite action yet taken.

PULLMAN, WASH.—It is reported that students of the University of Idaho, at Moscow, Idaho, are making surveys for water-works at this place.

PUYALLUP, WASH.—The Tacoma Gas & Electric Light Co., which owns the water-works at this place, is reported as about to secure a gravity supply from either Salmon or Elhi springs.

McMINNVILLE, ORE.—This city has purchased 5,000 ft. of pipe for the new works from the Crane & Jack Co.

PALO ALTO, CAL.—Bids are asked until Dec. 5 for the purchase of $40,000 in 5% water bonds; population 1,400. C. E. Moore, Engr.

PHOENIX, ARIZ.—We stated last week that the franchise granted to J. J. Gardiner had been repealed. Later information states that Mr. Gardiner has commenced the construction of works and has filed an injunction suit to restrain the city from interfering.

SALT LAKE CITY, UTAH.—The Silver Lake Water Co. has been incorporated with a capital stock of $60,000; Pres., R. C. Chambers; Vice-Pres., John J. Daly; Secy.-Treas., Chas. L. Rood, all of Salt Lake City.

COWANSVILLE, QUE.—The Stadacona Water, Light & Power Co., of Montreal, is reported to have served a protest on the mayor, in which it claims the sole right to construct water-works in this city and that the action of the council in undertaking the work is illegal.

RENFREW, ONT.—James Clark, Mayor, writes us that Alexander Potter, 137 Broadway, New York, has made preliminary surveys for a gravity supply from Hurd's Lake, about five miles distant, and that the question of issuing $60,000 in bonds for the construction of a system will probably be voted upon in January.

## IRRIGATION.

CROWLEY, LA.—It is reported that a company has been organized to build an irrigation canal, to be about five miles long; capital stock, $25,000. J. T. Shoemaker, Pres.; W. E. Lawson, Secy.; A. E. Kaplan, Treas.

ORD, NEB.—Press reports state as follows: The recent decision of the U. S. Supreme Court regarding the Wright irrigation law is of great importance to Valley county. It is expected that the Ord district will soon commence to build its ditch, for which $50,000 in bonds were voted and have been issued. The work on the ditch only depends upon the sale of these bonds, which are made good by the decision. The ditch line is surveyed and ready to begin work on at once. There have been several ditch contractors in this city, looking after the contract to build the ditch, and they are willing to take the bonds.

LARAMIE, WYO.—It is stated that arrangements are being made by Col. Wm. F. Cody and Col. J. A. Gillies, both of Laramie, Wyo., and of Ogden, Utah, for the immediate construction of an irrigation ditch in the Big Horn country, to be 150 miles long and to cost about $600,000.

FRESNO, CAL.—P. Y. Baker is reported to have been awarded the contract for constructing an irrigation system in the Sunset irrigation district. The main canal, 12 miles long, will tap the Zalda canal near Kings River, and will have five lateral canals, each 45 miles long, running north, and five more canals, each 50 miles long, running south. The cost if the work will be about $1,500,000.

MODESTO, CAL.—Judge James A. Waymire has been awarded the contract for constructing an irrigation system in the Turlock irrigation district at about $400,000. Work will be begun at once, according to reports. Col. Geo. Stone and C. H. Leadbetter are interested.

SAN DIEGO, CAL.—It is reported that the construction of the irrigation system in the Linda Vista district will soon be begun. A dam, 154 ft. high, at Pamo, to cost about $240,000, will be constructed at once. Other work will be done in connection with this system, to cost a total of about $1,000,000. Col. J. P. Jones can be addressed.

NEW COMPANIES.—Keweah Power & Water Co., Phoenix, Ariz., and Los Angeles, Cal.; $300,000; to construct irrigation canals, flumes, reservoirs, etc., and to supply electric power, etc.; John A. Pirtle, E. C. Ware, Geo. Hanna, Los Angeles, Cal.; O. P. Ainsworth, Pasadena, Cal.; A. G. Wishon, Tulare, Cal.

Cebolla Water Co., Santa Fe, N. Mex.; to construct an irrigation system in the Red River mining district, Taos county, N. Mex.; $100,000; Clarence P. Eldred, John H. Knaebel, James M. Strickland, Ralph W. Langdon, Arthur Knaebel, of Denver, Colo.

## SEWERAGE.

WAKEFIELD, MASS.—At a town meeting Nov. 23 it was voted to postpone the question of constructing a sewer system for an indefinite period. Louis E. Hawes, Chn. Com., Tremont Bldg., Boston.

WATERBURY, CONN.—Rudolph Hering, 277 Pearl St., New York, has submitted a report to the sewer commissioners of this city in which he recommends the construction of a system of sewage disposal by land filtration. R. A. Cairns, Cy. Engr.

WOONSOCKET, R. I.—An appropriation of $15,000 has been made by the council to continue the construction of sewers in certain streets. F. H. Mills, Cy. Engr.

ALBANY, N. Y.—Bids are asked until Dec. 7 for constructing a 30 to 12-in. pipe sewer in Quail St.; two sureties of $5,000 each are required. T. J. Lanahan, Clk.

BUFFALO, N. Y.—Bids are asked until Dec. 8 for constructing 55 to 30-in brick sewers in four streets, and 12 to 10-in. pipe sewers in two streets. R. G. Parsons, Secy. Dept. Public Wks.

LITTLE FALLS, N. Y.—The board of public works has awarded the contract for constructing sewers in five streets to Lansing & Ingham, at $4,752; Halliman Bros. & Fenton were the only other bidders at $6,295.

LONG ISLAND CITY, N. Y.—Bids are asked until Dec. 8 for constructing sewers in Webster Ave. from the East River to Jackson Ave.; check, $5,000. John W. Moore, Secy. General Improvement Comn., Jackson Ave. and 5th St.; Edward Dowling, Pres. Comn.

JERSEY CITY, N. J.—Bids are asked until Dec. 7 for constructing 1,700 ft. of 24 to 12-in. pipe sewers in three streets, work including 500 cu. yds. of rock excavation. Geo. T. Bouton, Clk. Bd.——Press reports state that Vice-Chancellor Pitney has decided that Jersey City is responsible for the nuisance created by the sewage emptied into the meadows from the Ravine Road sewer which drains a large portion of Jersey City Heights and a portion of West Hoboken. The city will be compelled by this decision to build another sewer at this place, at a cost of about $75,000.

TRENTON, N. J.—The ordinance committee will submit to the council an ordinance for constructing a sewer in Peters Alley. C. C. Haven, Cy. Engr.

NEW BRIGHTON, PA.—The councilmen are considering methods of disposing of the sewage of this place. Thos. Dixon, Comr. Pub. Wks.

SOUTH BETHLEHEM, PA.—The question of reconstructing certain sewers in the market district is being considered. R. E. Neumeyer, Engr.

BALTIMORE, MD.—Bids were asked until Dec. 14 for constructing sewers in two streets. Janon Fisher, Cy. Comr.

CUMBERLAND, MD.—This city is discussing the question of constructing a sewer system. Maj. J. W. McMurray can be addressed.

LOUISVILLE, KY.—J. H. Pearson, Cy. Engr., has recommended the construction of a trunk sewer in Bear Grass Creek, to be 14,100 ft. in length and to cost $549,900, as noted more fully in our issue of Oct. 15. It is also recommended that a western outfall sewer be constructed at a cost of $150,000, and sewers in three other streets, to cost $135,000.

SPRINGFIELD, O.—The council has passed an ordinance for constructing 24 and 30-in. pipe sewers in three streets. C. C. Fried, Pres. Council; S. J. Wilkerson, Cy. Clk.

GRAND RAPIDS, MICH.—The board of public works has decided to reconstruct the sewer in Goodrich St.

HOLLAND, MICH.—Mayor De Young and Aldermen Visscher, Takken, and Habermann have been appointed a committee to secure estimates for constructing a sewerage system in this city.

SPOKANE, WASH.—Oskar Huber, Cy. Engr., is preparing plans for a sewer system; estimated to cost $150,000.

ASTORIA, ORE.—The council will hold a meeting Dec. 16 to consider the question of constructing sewers in Second St. sewer district.

PORTLAND, ORE.—The construction of a sewer on the east side, to cost about $200,000, is being considered. Supt. Chase can be addressed.

MONTREAL, QUE.—The city surveyor has presented a report in favor of extending the sewers in Mill and Commissioners Sts., at a cost of $85,540. P. W. St. George, Cy. Surv.

## GARBAGE DISPOSAL—STREET CLEANING.

BRIDGEPORT, CONN.—Frank Miller, of this city, has been appointed receiver for the Bridgeport Utilization Co.

SYRACUSE, N. Y.—The garbage committee has recommended that a site be purchased and bids asked as soon as possible for the collection of the garbage of the city and its disposal by either the Holthaus or the Arnold system. Councilmen John Regan, O. A. Thomas and H. H. Lincoln and Drs. Gregory Doyle, J. W. Candee and F. W. Smith, of the board of health, are members of the committee.——Jos. J. Dailey and C. D. McGlehan have each submitted propositions to the council to construct a garbage disposal plant.

JERSEY CITY, N. J.—The contract for street cleaning has been awarded to Henry Byrne, whose bid is reported as follows: $14 a mile for 1,400 miles of paved streets, $12 a mile for 580 miles of brick and asphalt, and $10 a mile for 1,980 miles of other pavements.

PHILADELPHIA, PA.—Bids were opened by Thos. M. Thompson, Dir. Pub. Wks., Nov. 25 for street cleaning and garbage collection during 1897. The appropriation for street cleaning in 1896 was $492,918; lowest bids for 1897, $520,550; for garbage collection, 1896, $289,000; 1897, $327,200. The lowest bids Nov. 25 for street cleaning were: James P. McNichol & Co., $77,999 for first district and $163,999 for second district; K. & D. Dooley, $42,900 for third district; Jas. Curran, $128,718 for fourth district; David McMahon & Co., fifth district, $82,940. For collecting and disposing of garbage the American Incinerating Co. bid $55,500, $59,900, $36,800, $93,200 and $87,600, respectively, for the five districts, and the Philadelphia Incinerating Co. $59,400, $60,800, $38,000, $89,600 and $85,400; which would give each company the same districts as this year, although at increased prices.

WASHINGTON, D. C.—Mr. Warfield, the garbage contractor, has offered to sell his plant to the district. All the garbage is now being transported down the river in scows and sold.

CANTON, O.—A delegation of city officials has visited Lowell, Mass., and other cities, inspecting garbage disposal plants. L. E. Chapin, Cy. Engr.

CLEVELAND, O.—The garbage committee has returned from its trip of inspection and is said to be in favor of a reduction plant.

ST. PAUL, MINN.—The joint council committee on garbage is considering specifications for the collection of garbage during 1897. It is not probable that a crematory will be purchased at present. Fielding & Shepley are the present garbage contractors and Dr. Stone is Health Commissioner.

PORTLAND, ORE.—The council has received several offers of land for a site for a garbage crematory; also various propositions for garbage collection and disposal. A representative of the Engle Sanitary & Cremation Co. addressed the council recently.

## STREETS AND ROADS.

LEWISTON, ME.—The committee on highways has been petitioned to extend and otherwise improve Ash St., from Lisbon to Lincoln St. J. A. Jones, City Engr.

BROOKLYN, N. Y.—We are informed that the following bids were received Nov. 25 by the shore road commission for constructing the shore road, from Bay Ridge Ave. to 3d Ave., as advertised in Engineering News; bids were received in lump sum only; Edwin C. Swezey, Engr., 3d Ave. and 39th St.:

| | All trap. | Lime-stone. |
|---|---|---|
| Thos. Murphy, 25th and Cropsey Aves.[1*] | $112,500 | $110,000 |
| Cody Bros., 326 Park Ave.[1] | 112,900 | 110,800 |
| Dewitt C. Bouker, Jr., 434 3d St.[1] | 115,623 | 114,443 |
| Joseph Johnson, 193 Broadway[2] | 116,000 | 113,000 |
| Thos. F. Byrnes, 928 Franklin Ave.[1] | 123,000 | 121,000 |
| John J. Morrisey, 24th and Bath Ave.[1] | 134,230 | 129,230 |
| J. P. Graham, Bath Ave. & Bay 19th St.[1] | 137,189 | 134,318 |
| Chas. Hart, 4th Ave., cor. Degraw St.[1] | 139,700 | 129,478 |
| M. J. Dady, 40 Court St.[1] | 140,515 | 135,730 |
| Wm. Booth, 60 Bank St.[3] | 146,000 | 141,000 |
| E. J. McKeever & Bros., 95 Washgtn Ave.[1] | 147,000 | 145,000 |
| Harris & McGuire, 485 Flatbush Ave.[1] | 155,000 | 149,000 |
| Norton & Gorman, 303 Douglass St.[1] | 161,100 | 159,400 |
| John H. O'Rourke, 40 Court St.[1] | 174,000 | 169,000 |

*Informal; [1]Brooklyn; [2]New York; [3]West New Brighton, S. I.

LONG ISLAND CITY, N. Y.—Bids are asked until Dec. 8 for the purchase of $275,000 of 4% Queens county road bonds. Joseph Dykes, Treas. Queens county, L. I. City.

RIVER HEAD (L. I.), N. Y.—The wheelmen of Massapequa are about to petition the village board to macadamize the south turnpike from South Oyster Bay to the Suffolk county line.

NIAGARA FALLS, N. Y.—Bids are asked until Dec. 11 for 49,200 sq. yds. of asphalt paving, as stated in our advertising columns. W. W. Read, Cy. Engr.; S. F. Arkush, Cy. Clk.

ROCHESTER, N. Y.—An ordinance is being prepared authorizing the paving of the new boulevard with asphalt in ward 10, at a cost of $150,000. Alderman Selye can be addressed.

JERSEY CITY, N. J.—Press reports state as follows: The good roads association of Hudson county is preparing an act to be presented to the New Jersey legislature, looking to the further improvement of all public roads in the county. It provides that the Hudson Boulevard and all other public roads shall be removed from the control of the freeholders and placed in the hands of a board of highway commissioners. F G. Wolbert, Pres. association.——The question of extending the Hudson Boulevard is also being discussed.

PASSAIC, N. J.—At an election last week the proposition to macadamize the roads in Midland Park was carried.

ATHENS, PA.—Bids are asked until Jan. 1 for 6,600 sq. yds. brick paving, 3,000 lin. ft. curbing and 2,700 cu. yds. excavation, as stated in our advertising columns. Wm. B. Landreth, Engr.; C. W. Tidd, Secy.

EASTON, PA.—At the election next spring the question of issuing $248,500 in bonds for street improvements will be voted upon. H. R. Fehr, Cy. Engr.

JOHNSTOWN, PA.—Marsh & Keedy, of Hagerstown, Md., have been awarded the contract for macadamizing the Johnstown, Indiana & Westmoreland turnpike.

WASHINGTON, PA.—It is reported that this place will soon issue $10,000 in bonds for streets.

BALTIMORE, MD.—Bids are asked for paving with cobble stones portions of two streets, or a total of 14 blocks. Janon Fisher, Cy. Comr.——Daniel Sullivan was awarded the contract last week for surfacing and macadamizing 1,500 lin. ft. of Augusta Ave. at $1,089.——The trustees of Johns Hopkins Hospital have petitioned the council to pave with asphalt the streets bounding the square occupied by the hospital buildings.

WASHINGTON, D. C.—Bids are asked until Dec. 7 for widening and macadamizing the military road from the aqueduct bridge to Arlington Cemetery; also to widen and repair the bridge on this road. Maj. C. F. Humphrey, Q. M., Washington.——Plans have been completed for a bicycle path to connect Baltimore and Washington, a distance of 40 miles; estimated cost, $40,000. H. L. Millner, Room 32, 615 Fourteenth St., can be addressed.

NEW ORLEANS, LA.—The committee has reported favorably on paving portions of two streets with Belgian blocks and for constructing sidewalks in two others. W. G. Turner, Chn. Com.

CHATTANOOGA, TENN.—Residents of Highland Park propose to build a boulevard from Highland Park to Missionary Ridge.——It is reported that the board of public works has decided to pave Oak St., between Palmetto St. and Fairview Ave. Robt. Hooke, Cy. Engr.

COVINGTON, KY.—It is reported that bonds are about to be issued for brick paving in a number of streets in this city. T. H. Kennedy, Cy. Engr.

CLEVELAND, O.—The park board has taken steps to convert Euclid Ave. into a boulevard. The street car tracks are to be removed and the avenue extended and beautified. C. W. Pratt, Jr., Ch. Engr. Park Bd.

TOLEDO, O.—Arrangements are being made to construct a boulevard in East Toledo, to be six miles long and from 80 to 100 ft. in width. W. G. Clark, Cy. Engr.

BAY CITY, MICH.—The legislature is to be petitioned for authority to issue $50,000 in bonds for paving Center Ave. with asphalt; estimated to cost $70,000, the balance now being on hand. Geo. Turner, Cy. Engr.

SAGINAW, MICH.—The council has voted to pave Hamilton St. with brick. The committee consists of J. W. Fordney, M. N. Bradley and George Davenport.

SALT LAKE CITY, UTAH.—The county commissioners have been petitioned to reconstruct the road in Ogden Canyon, from Winslow's Place to the valley.

FORT YELLOWSTONE, WYO.—Capt. G. S. Anderson, U. S. A., Supt. of Yellowstone National Park, has submitted his annual report to the Washington authorities in which an estimate of $100,000 is made for improvements to be spent the coming year, and $50,000 to be used the year after for building a road.

SPOKANE, WASH.—The question of paving Main St. with brick is being discussed. Oskar Huber, Cy. Engr.

EUREKA, CAL.—Bids are asked until Jan. 14 for building a portion of county road, according to reports. O. D. Stern, Clk. Supervisors, Eureka.

## MANUFACTURING PLANTS.

WORCESTER, MASS.—The Webb Granite & Construction Co. has been awarded the contract for building the new shop of the Curtis & Marble Machine Co. on Cambridge St. to cost $50,000. The building will be 228 x 64 ft., four stories high. The plans have been made by Lockwood, Greene & Co., of Boston.

PAWTUCKET, R. I.—The Howard & Bullough American Machine Co. has let the contract for an extension to its works. The new building will be 324 x 69 ft. The addition will be a 3-story brick building, and will give over 67,000 sq. ft. additional floor space.

NEW HAVEN, CONN.—Otto C. Wolf, 1345 Arch St., Philadelphia, has prepared plans for a 75 x 85-ft. 6-story addition to the plant of the Quinnipiac Brewing Co.; will include a platform elevator, and will increase capacity of plant by 350 bbls. daily. Geo. Bohn has the mason contract.

WINDSOR LOCKS, CONN.—Fire caused a loss of about $10,000 in the foundry of E. Horton & Sons, Nov. 23.

LONG ISLAND CITY, N. Y.—The fertilizer plant of Preston & Sons, on Greenpoint Ave., was totally destroyed by fire Nov. 26. Loss, about $200,000.

CAMDEN, N. J.—Thomas Stephen, Masonic Bldg., is said to be drawing plans for a woollen yarn factory that will be built on Market St. for Shimer & Boyer, 516 Market St., Philadelphia. This factory will be constructed of brick and iron, four stories high, with a slag roof. The cost will be about $30,000.

ALLENTOWN, PA.—Lehr, Leh & Martz, are preparing plans for a brewery which will be built at Allentown for the Lehigh Valley Brewing Co. It will be constructed of brick and iron, with a slag roof. It will be three stories high. The machinery will be let in a separate contract. It will cost about $90,000.

CONNELLSVILLE, PA.—It is stated that Armour & Co., of Chicago, have purchased ground for a large cold storage plant on 8th and Fayette Sts., and that this plant will be built before the opening of spring. Also that the Yough Crystal Ice Co. will erect a cold storage plant 40 x 60 ft., possibly three stories high.——The Slaymaker Barry Co. is said to be preparing plans and receiving bids for the erection of an addition to the works in the shape of an iron foundry.

CORRY, PA.—The brush block, mechanical toy and skewer factory of Mehl, Son & Co., was badly injured by fire on Nov. 25.

LATROBE, PA.—It is reported that the glass manufacturing plant of Hamilton Bros., Pittsburg, may be removed to this place.

McKEESPORT, PA.—It is stated that Devenny Bros. are endeavoring to secure a site for a firm which wants to establish a steel mill. The mill will employ about 500 men if erected.

RIVERTON, PA.—T. F. Newby, of Harrisburg, will erect a large roller flour mill at this place.

STROUDSBURG, PA.—Fire destroyed the plant of the International Boiler Works in East Stroudsburg Nov. 24, involving a loss of about $40,000. The members of the firm have decided to rebuild at once.

UPLAND, PA.—It is said to be likely that a cotton mill will be established here in the near future.

YORK, PA.—The Queen St. shops of the Martin Carriage Works were destroyed by fire Nov. 29, entailing a loss of nearly $50,000. The insurance is about half that figure.

WASHINGTON, D. C.—The lumber yard and planing mill of Thomas W. Smith & Son, located at North Capitol and H Sts., was totally destroyed by fire Nov. 24. The loss is estimated at between $60,000 and $75,000.

PARKERSBURG, W. VA.—J. N. Camden writes us that negotiations are pending with favorable chances for the organization of a pulp and paper company, as previously reported.

WHEELING, W. VA.—The Schmulbace Brewing Co., it is said, will make improvements to its brewery, erecting new buildings and adding machinery.

WILMINGTON, N. C.—James H. Chadbourne and associates will build a $150,000 cotton spinning mill and will want an entire outfit of machinery, etc., next spring, including probably an electric light plant.

MANNING, S. C.—W. Scott Harvin is building a new knitting mill and will want machinery and complete equipment for same within 30 days.

MARION, S. C.—A. M. Price, of Lincolnton, N. C., and J. T. Blythe, of Philadelphia, Pa., have purchased the property of the Marion Cotton Mfg. Co. at this place and will at once put in $15,000 to $25,000 worth of new machinery. The same parties will establish a knitting mill and will want all the machinery required for both plants.

UNION POINT, GA.—A $45,000 knitting mill is to be erected at this place by a company of business men of the town.

BIRMINGHAM, ALA.—Trainer & Sons, of Chester, Pa., are said to intend building a cotton mill here.

DECATUR, TENN.—The enlargement of the Louisville & Nashville Ry. shops at this place is being considered. Supt. A. Beckert.

MACON, GA.—The Georgia Mills & Elevator Co. is preparing to add $50,000 worth of improvements to its plant, according to reports.

HUNTSVILLE, TENN.—The Dallas Mfg. Co. is said to be considering the enlargement of its cotton mill to twice its present size. The mill is valued at $650,000.

NELSONVILLE, O.—The entire plant of the East Clayton Brickmaking Co. was destroyed by fire Nov. 28. The loss is estimated at $100,000; insurance, $22,000.

KANSAS CITY, MO.—Col. C. F. Morse has bought land for the site of a new asphalt plant.

ST. LOUIS, MO.—Zenas Varney's carriage factory was partially destroyed by fire Dec. 1. The loss is estimated at $100,000.

TRAIL, B. C.—E. H. Kane, Secy. and Treas., Sick & Heiber Brewery, is quoted as saying that the plant will soon be enlarged. A new steam and ice plant will be put in while the capacity of the brewery will be from 40 to 50 barrels per day.

MAISONNEUVE, QUE.—The town has been asked to give a $10,000 bonus to aid in building a brewery to cost $150,000. Among those interested are Alderman Prefontaine, C. A. Senecal and E. Sazarin.

## GAS PLANTS.

FULTON, N. Y.—The Fulton Natural Gas Co. is reported not to have proved a success and it is said that a new company will be organized and will probably locate its plant in the northern part of the village.

CANISTEO, N. Y.—This village has granted a franchise to the Hornellsville & Canisteo Gas Co. and has contracted with the company for 70 street lights; mains are to be laid as soon as possible. I. Edward Lyon, Pres. Village Trustees.

RICHMOND HILL, N. Y.—We noted Nov. 19 that the franchise of the Richmond Hill & Queens County Gas Co. would probably be revoked. The company has since petitioned for permission to assign its franchise to the Brooklyn Union Gas Co. It is said that 15 miles of pipe were laid by the company, but lack of capital prevented it from completing the plant as required by its franchise. If the franchise is assigned to the Brooklyn Union Gas Co. it is probable the mains will be completed and connected with the Newtown plant and gas furnished by Jan. 1. The Bocklen Gas & Construction Co. and Joseph Garcia have also petitioned for the franchise.

NEWPORT NEWS, VA.—The council has granted a franchise to the Newport News Gas, Fuel & Power Co.

FINDLAY, O.—The proposition of F. L. Slocum to purchase the gas plant of the city for $150,000 was recently noted. The gas trustees have offered to sell the plant for $175,000, but refuse a less sum. H. F. Burket is local attorney for Mr. Slocum.

HARTFORD CITY, IND.—A press report from this city states that the reports of correspondents from towns outside the gas belt that recent investigations in all parts of the gas field have established that the supply of natural gas is rapidly decreasing, are false and misleading. State Inspector Leach says he has just completed a number of tests of wells in various parts of the natural gas area of Indiana and that he found the wells all showing up strong, and giving promise of satisfactory service the coming winter. This is the eleventh year of natural gas in Indiana.

CHICAGO, ILL.—The Chicago Acetylene Gas & Carbide Co., noted Nov. 19 as incorporated, is said to have purchased the Mayo patent for making calcium carbide. The company is erecting a plant at Oregon, Ill., where it claims 6,000 HP. Reports state that the capacity of the plant will be six tons a day, and that it is to be in operation in 30 days.

CHICAGO, ILL.—The Chicago City Ry. Co., according to the "Times-Herald," proposes to use acetylene gas on certain of its cars instead of Pintsch gas and has already contracted for the former on condition that the underwriters' association gives its consent.

## MISCELLANEOUS CONTRACTS.

BONDS.—Buffalo, N. Y.—Bids are asked until Dec. 10 for the purchase of $527,765 of 3½% tax loan bonds. E. C. Knight, Comptroller.

STONE CRUSHER AND ROLLER.—Norwalk, Conn.—The selectmen have voted to appropriate $5,000 for a road roller and stone crusher.

TELEPHONE FRANCHISE.—San Francisco, Cal.—The People's Mutual Telephone Co. has been granted a franchise to construct a system in this city.

DREDGING.—Grand Rapids, Mich.—Bids are asked until Dec. 21 for dredging Grand River, Mich. Capt. C. McD. Townsend, U. S. Engr., 136 Island St.

IMPROVEMENT BONDS. — Syracuse, N. Y.—Bids are asked until Dec. 7 for the purchase of $320,000 of 4% improvement bonds. E. A. Allen, Cy. Treas.

STONE CRUSHER.—Holyoke, Mass.—The question of purchasing a stone crusher is being considered by the board of public works. Alderman Gervais, Chn. Com.

BONDS.—Boston, Mass.—The state treasurer has awarded the $8,225,000 in 3½% state bonds, noted last week, to a syndicate represented by Kidder, Peabody & Co., at 105.829.

DAMS. — San Francisco, Cal. — The state debris commission Nov. 23, granted permission to the Bell & Dorsey mine and the Blue Eyes mine in El Dorado county, to construct dams.

JETTY.—Wilmington, Del.—Bids are asked until Dec. 28, for constructing brush and stone jetty in harbor of Cape Charles City, Va., as stated in our advertising columns. Maj. W. F. Smith, U. S Agent.

ROAD ROLLER.—Oakland, Cal.—An ordinance has been passed by the council directing the board of public works to receive bids and purchase a steam road roller, and appropriating $4,000 for the purpose. J. W. Tompkins, Cy. Clk.

ROCK FOR JETTIES.—St. Augustine, Fla.—Bids are asked until Dec. 16 for delivering 30,000 tons of rock upon the jetties at the mouth of St. John's River, Fla., as stated in our advertising columns. Lt.-Col. W. H. H. Benyaurd, U. S. Engrs.

CEMENT.—New York, N. Y.—Bids are asked until Dec. 8 for the purchase of about 4,000 bbls. of Portland cement. Only one bid was received for this at the opening of bids last week and this was rejected. Geo. S. Terry, Secy. Dock Dept., Pier A.

TERRA COTTA.—Milwaukee, Wis.—Bids are asked until Jan. 5, for furnishing and setting in place all the terra cotta for two bridges in Lake park, as stated in our advertising columns. Oscar Sanne, Engr., Colby & Abbot Bldg.; Chas. K. Lush, Secy. Park Comrs.

STREET SPRINKLING.—St. Louis, Mo.—A sprinkling ordinance for 1897 has been approved by the board of public improvements. It appropriates $125,000, and provides for the sprinkling of 496 miles of streets, or an increase of 23 miles over the past two years.

ROAD ROLLER. — Spokane, Wash. — The council requested the board of public works Nov. 11 to ascertain the cost of a steam roller, terms of payment, etc., as the council proposes to purchase a roller that the work of putting the streets in good condition can be taken up soon.

CANAL.—Salt Lake City, Utah.—The city engineer has submitted estimates for extending the surplus canal at a cost of $35,000. The report was referred to a special committtee consisting of Councilmen Le Prohon, Allen, Callister, Diehl and Romney, the first named to act as chairman.

DOCKS.—Conneaut, O.—A press dispatch from Cleveland says: A contract was closed Nov. 25 by Andrew Carnegie of Pittsburg, for the construction of an ore and coal loading plant at Conneaut, and extensive docks will also be built here. Conneaut is the northern terminus of Mr. Carnegie's new railway system.

BANK EQUIPMENT.—The Morganton Land & Improvement Co., Morganton, N. C., will soon purchase a complete outfit for its new bank building, now under construction.——B. D. Heath, Pres. Charlotte, N. C., National Bank, just organized, is in the market for safes, vaults, and other equipment for a bank.

CANAL WORK.—Sault Ste. Marie, Mich.—A press report Nov. 28 states that it is now a settled fact that work on the Soo water-power canal will be commenced within 30 days. The canal will be about 400 ft. wide and not 250 ft. as was first intended.

FIRE HOSE.—New York, N. Y.—Bids are asked by the fire department, 157 E. 67th St., until Dec. 9 for the purchase of 2,000 ft. of 3-in. woven cotton, rubber-lined fire-hose, Eureka fire-hose brand, 3,000 ft. of 2½-in. woven cotton, rubber-lined fire-hose, Paragon brand; 1,000 ft. of 1½-in. woven cotton, rubber-lined fire-hose, Paragon brand.

GUN EMPLACEMENTS.—New London, Conn.—Press reports state that the lowest bid received by Capt. Smith S. Leach Nov. 28 for constructing gun emplacements on Gull Island, as advertised in Engineering News, was that of J. W. Hoffman & Co., Philadelphia, at $103,629. The work will include 15,700 cu. yds. of concrete and is to be completed within six months, according to the report.

INLET HARBORS.—Hammond, Ind.—A press report from this city announces that plans for inlet harbors at Wolf and George lakes, connecting Lake Michigan and Calumet River by a canal 300 ft. wide, have been submitted to Mayor Marshall, and a movement is on foot to push a measure in the general assembly authorizing North township to issue $200,000 in bonds for the completion of the work.

LEVEE WORK.—Pueblo, Colo.—We are informed that the permanent river improvement plan is to be extended by constructing about 1,200 ft. of levee to consist of masonry and slag. The work is not advertised yet. In fact it was let last spring but the contract was withheld pending negotiations with the Missouri Pacific R. R. The work may proceed under old contract or may be re-advertised. E. W. Hathaway, Cy. Engr.

CRIB WORK.—New York, N. Y.—The following bids were received Nov. 24 for crib work in Sherman's Creek on the Harlem River; Geo. S. Terry, Secy. Dept. of Docks, Pier A, Battery Park:

| | |
|---|---|
| John W. Flaherty, 510 Macon St., Brooklyn | $39,915 |
| Chas. F. Mairs, 147 W 105th St., New York city | 38,485 |
| P. Sanford Ross, Jersey City (accepted) | 35,000 |
| Spearin & Preston, 87 W. 4th St., Bayonne, N. J. | 36,895 |
| James D. Leary, 43 E. 25th St., New York | 39,900 |

MORTAR BATTERY.—Galveston, Tex.—Maj. A. M. Miller is reported to have received the following bids Nov. 30 for constructing a mortar battery at Fort Point, Galveston, as advertised in Engineering News:

| | |
|---|---|
| Henry L. Breneman, Paris, Tex | $96,402 |
| Isaac Heffren, Galveston | 131,092 |
| John A. Davis, Galveston | 176,478 |
| Thompson & Gray, St. Louis | 124,580 |
| Lawrence Velder, Galveston | 241,000 |

TELEPHONE COMPANIES.—The Vermont legislature which adjourned last week granted charters to the following telephone companies: Springfield Telephone Co., Hartford Telephone Co., Chester Telephone Co., Warren Telephone Co., Northfield Telephone Co., Enosburg Telephone Co., Ludlow Telephone Co., South Woodstock Telephone Co., Rupert Telephone Co., Grand Isle Telephone Co., Lincoln & Bristol Telephone Co., Bennington Telephone Co., Citizens' Telephone Co., Northern Telephone Co., People's Telephone Co.

SUBWAY.—Baltimore, Md.—N. S. Hill, Jr., Engr., Electrical Subway Comm., has submitted a report in regard to the general system of subways proposed. A loan of $1,000,000 has been indorsed by the people for the construction of the subways, intended for wires of all kinds, principally within the business section of the city. The boundaries of the proposed subway under the $1,000,000 loan are: St. Mary's and Madison St. on the north, Central Ave. on the east, Lee St. and the water front on the south, and Greene, Penn and Paca Sts. on the west.

UNDERGROUND CABLE. — Cincinnati, O. — The fire commissioners, Nov. 20, received the following bids for electric cables and conduits in the district between Third St. and Canal and Central Aves. and Broadway: Western Electric Co., $9,800; Safety Insulated Wire & Cable Co., $9,250; Standard Underground Cable Co., $12,890; American Electrical Works, $9,950. City Electrician J. A. Cabot recommended that the Postal and Western Union companies be required to lay a common conduit between Fourth and Seventh Sts., on Vine St., so that the fire department conduits can be connected with them.

PIER WORK.—Milwaukee, Wis.—Capt. Geo. A. Zinn received the following bids Nov. 27 for pier extensions at Manitowoc, Kewaunee, South Milwaukee, Racine and Kenosha, as advertised in Engineering News:

Kewaunee Harbor.—425 lin. ft. of pile pier.

| | |
|---|---|
| P. W. Galloway, Racine, Wis. | $15,145 |
| McArthur Bros. & Co., Chicago | 16,375 |
| Grieling Bros., Green Bay, Wis | 18,212 |
| A. Green & W. B. Anderson, Green Bay, Wis | 16,325 |
| James A. Beauvais, Charlevoix, Mich | 18,456 |
| J. A. Eslow & J. Munroe, Charlevoix, Mich | 16,305 |
| Chicago Star Construction & Dredging Co | 17,916 |
| Joseph Wolter, Sheboygan, Wis | 15,665 |
| Hausler & Lutz Towing & Dock Co., Chicago | 15,654 |
| D. A. McLeod & W. McLeod, Manistee, Mich | 19,790 |
| John M. Borgman, Kewaunee, Wis | 15,409 |
| Mathews & Kieth, Manitowoc, Wis | 16,177 |
| George Cooper, Manitowoc, Mich | 15,559 |
| *Thomas J. McGrath, Green Bay, Wis | 15,119 |

Manitowoc Harbor, Wis.—500 lin. ft. of crib pier.

| | |
|---|---|
| Thomas J. McGrath, Green Bay, Wis | $30,004 |
| McArthur Bros. & Co., Chicago, Ill | 29,810 |
| Mathews & Keith, Manitowoc, Wis | 31,543 |
| George Cooper, Manitowoc, Wis | 27,924 |
| Adolph Green & W. B. Anderson, Green Bay, Wis | 29,665 |
| Donald A. McLeod & William McLeod, Manistee | 31,299 |
| Arthur J. Gaylord, Ludington, Mich | 28,768 |
| Jas. E. Eslow & John Munroe, Charlevoix | 35,438 |
| Chicago Star Construction & Dredging Co | 31,413 |
| *Hausler & Lutz Towing & Dock Co., Chicago | 27,634 |
| Knapp & Gillen, Racine, Wis | 28,920 |
| Joseph Wolter, Sheboygan, Wis | 29,470 |

South Milwaukee Harbor, Wis.—180 lin. ft. of pile pier.

| | |
|---|---|
| P. W. Galloway, Racine, Wis | $4,509 |
| James Cape & Son, Racine, Wis | 5,565 |
| P. F. Kelly, Milwaukee, Wis | 4,513 |
| Knapp & Gillen, Racine, Wis | 5,268 |
| Jas. A. Eslow & John Munroe, Charlevoix | 5,311 |
| Chicago Star Construction & Dredging Co | 5,160 |
| John Borgman, Kewaunee, Wis | 4,789 |

Racine Harbor, Wis.—250 lin. ft. of crib pier.

| | |
|---|---|
| P. W. Galloway, Racine, Wis | $11,567 |
| James Cape & Son, Racine, Wis | 14,240 |
| *Knapp & Gillen, Racine, Wis | 11,434 |
| McArthur Bros. & Co., Chicago, Ill | 11,533 |
| George Cooper, Manitowoc, Wis | 12,070 |
| Chicago Star Construction & Dredging Co | 12,900 |
| Hausler & Lutz Towing & Dock Co., Chicago, Ill. | 11,834 |

Kenosha Harbor, Wis.—250 lin. ft. of crib pier.

| | |
|---|---|
| P. W. Galloway, Racine, Wis | $13,418 |
| James Cape & Son, Racine, Wis | 15,007 |
| *McArthur Bros. & Co., Chicago, Ill | 12,376 |
| Knapp & Gillen, Racine, Wis | 12,418 |
| George Cooper, Manitowoc, Wis | 12,468 |
| Jas. A. Eslow & John Munroe, Charlevoix, Mich | 13,222 |
| Chicago Star Construction & Dredging Co | 13,479 |
| Hausler & Lutz Towing & Dock Co., Chicago, Ill | 12,381 |

*Lowest bid.

DAM.—Menominee, Mich.—It is reported that the stockholders of the Hemlock Mine have decided to dam the Hemlock River some distance above the mine. A giant sluiceway of matchwood, resting on two arches, will be built. The sluiceway will be 1,500 ft. long, will cost $10,000, and will be constructed this winter. in this way the river bed will be diverted.

PARK.—Springfield, O.—J. & D. L. Snyder one year ago gave to this city 210 acres of land for park purposes providing the city spent $25,000 improving it. This amount has been spent and 40 acres of the park has been laid out. Recently Messrs. Snyder donated $25,000 in cash in order that the work may not stop. Of this amount $8,000 will be spent in bridging Buck Creek. The landscape work will continue in charge of Hanlin & Hanlin, of Cincinnati, O. John Foos, Pres. Bd. Pub. Affairs.

PNEUMATIC TUBES.—Boston, Mass.—The board of aldermen adopted an order Nov. 30 approving a contract made by the mayor with the Boston Pneumatic Transit Co. The company will place pneumatic tubes in certain streets and pay the city for the franchise. The payment the first year will be one-half of 1% of the company's gross receipts. Each subsequent year the payment will be increased one-quarter of 1%, until it shall amount to 2½%, which thereafter will be the annual payment.

CANAL IMPROVEMENTS.—Albany, N. Y.—Bids are asked until Dec. 9 for the following canal work: Rebuilding culvert under the Erie Canal at Canaseraga Creek; rebuilding abutment of Jay St. bridge, Rochester; constructing cast-iron pipe culvert over the Oswego Canal at Bloody Brook, and for improving the channel of Bloody Brook at Onondaga Lake; steel trunk for aqueduct on the Erie Canal at Saquoit Creek, near Yorkville; rebuilding culverts Nos. 36 and 38 in Brighton, and for rebuilding culvert No. 80 on the Erie Canal. Thos. Wheeler, Asst. Supt., Syracuse; R. G. Lay, Asst. Supt., Rochester; G. W. Aldridge, Supt. Pub. Wks., Albany.

GUN BATTERY.—Baltimore, Md.—Col. Peter C. Hains received the following bids Nov. 27 for building a gun battery at Hawkins Point, Md.:

| | |
|---|---|
| Jones, Pollard & Co., Fidelity Bldg., Baltimore | $122,064 |
| Douglas & Andrews, Baltimore | 126,295 |
| Sanford & Brooks, Baltimore | 130,669 |
| John J. Shipman, Washington, D. C | 133,246 |
| Henry Smith & Sons, Baltimore | 135,594 |
| Isaac S. Filbert, Baltimore | 137,905 |
| Nordin & Anderson, McDonogh, Md | 140,518 |
| John L. Grim, Philadelphia | 141,572 |
| Maryland Mfg. & Const'n Co., Baltimore | 157,355 |
| Owen Patterson, Baltimore | 165,666 |

PARK.—Newport, R. I.—The park commission has received a plan from Olmstead & Eliot, of Boston, for the proposed Marine Park along the south shore of Newport Harbor, on which the city proposes to spend about $50,000. The plan proposes an artificial beach 925 ft. long, with bastions at each end and a wall in front. Between the latter and Wellington Ave. a lawn with shade trees is suggested, which may be used as a playground in the summer and be flooded for a skating rink in winter. An aquarium is also suggested. The park commission, which includes Col. John Hare Powel, Norman Weaver, Samuel R. Honey, Theodore K. Gibbs, 62 West 21st St., New York, and W. W. Sherman, 838 Fifth Ave., New York, was instituted for the purpose of devising means to beautify the town of Newport. It is the duty of that body to present plans to the council, who will do the actual work of letting the contracts and seeing that the park is laid out.

STAIRWAYS. — Boston, Mass. — The Boston transit commission Nov. 24 opened bids for the building of eight stairways and coverings for the subway on Boston Common, as follows; B. L. Beal, Secy.:

| | Stone. | Brick. |
|---|---|---|
| *Norcross Bros, Tremont Bldg | $89,599 | $68,827 |
| J. A. Colson, 30 Monument St. (1) | 92,990 | 68,990 |
| James Fagan, 166 Devonshire St. | 83,500 | 74,000 |
| Woodbury & Leighton, 166 Devonshire St. | 93,934 | 73,900 |
| L. D. Willicutt & Co., 166 Devonshire St. | 93,783 | 73,491 |
| Connery & Wentworth, 22 Pemberton Sq. | 97,000 | 75,957 |
| C. H. Dodge, 166 Devonshire St. | 97,611 | 81,459 |
| J. S. Jacobs & Sons, 37 Portland St. | 97,974 | 74,974 |
| C. A. Dodge & Co., 166 Devonshire St. | 98,541 | 78,296 |
| W. A. & H. A. Root, 166 Devonshire St. | 132,000 | 121,846 |

*Awarded contract. (1) Charlestown; all others Boston.

CANAL IMPROVEMENTS.—Albany, N. Y.—George W. Aldridge, Supt. Pub. Wks., awarded on Nov. 25 contracts to the following for canal improvements: For protecting west bank of Chemung River, to R. E. Beardsley, Elmira, $3,177; for constructing steel swing bridge across the Black River, near Lowville, to The Owego Bridge Co., Owego, $2,928; for the deepening and widening of the canal leading from Shinnecock to Great South Bay, town of Southampton, Suffolk county, to P. J. Brummelkamp, Syracuse, $4,220; for rebuilding east pier of Belgium bridge across Seneca River, to John J. Hallock, Syracuse, $2,780; for constructing cast-iron culvert under the Genessee River feeder, in Rochester, to B. P. Smith, Rochester, $2,088; for repairing culvert under Oswego Canal, between the Hydraulic Canal and Old Shenandoah Mills at Oswego, to Edward S. Candee, Syracuse, $4,090; for rebuilding lock No. 49, Black River Canal, to William J. Cramond, Rome, $16,107; for repairing, etc., slopes and banks and the channel of Falls Creek, Montour Falls, to R. E. Beardsley, Elmira, $3,039.

## CONTRACT PRICES.

BRICK SEWER.—Frankfort, Ind.—Alonzo J. Hammond, Cy. Engr., received the following bids Nov. 20 for constructing 430 ft. of 2-ring brick sewer 36 ins. in diameter, as advertised in Engineering News; contract awarded to C. H. Condon, at $1,068:

| | Sewer per ft. | manholes, each. |
|---|---|---|
| Chas. R. Wightman, Chicago, Ill | $2.59 | $20.00 |
| E. P. Hodgkins, Chicago, Ill | 2.24 | 21.00 |
| J. R. Brown, Frankfort, Ind | 2.98 | 30.00 |
| Ross & Hedgcock, Frankfort, Ind | 2.40 | 25.00 |
| C. H. Condon, Frankfort, Ind | 2.32 | 35.00 |

BRICK PAVING.—St. Augustine, Fla.—The contract for paving St. George St., with the Reynolds block, has been awarded to F. W. Beers, of St. Augustine, at $1.50 a sq. yd., including all costs except curbing, and with 5-year guarantee. Chas. Sperry, Cy. Engr.

PAVING, ETC.—Allegheny, Pa.—The contract for grading, paving and curbing Fountain St., from Sandusky to Compromise St., has been awarded to A. V. Purnell, at $16,615, as follows: 5,800 cu. yds. excavation, at 33 cts.; 2,200 sq. yds. brick sidewalk, at 52 cts.; 3,600 sq. yds. Ligonier block paving, at $1.62; 2,600 lin. ft. curb, at 50 cts.; 250 lin. ft. granite crossing, at 70 cts.; 1,200 cu. yds. rubble masonry, Beaver county stone, at $5.

GUN EMPLACEMENTS.—Wilmington, N. C.—Lieut.-Col. D. P. Heap informs us that the bid of J. L. Grim, 514 Girard Bldg., Philadelphia, has been recommended for acceptance for the construction of gun emplacements near the mouth of Cape Fear River, as advertised in Engineering News; the bids were opened Nov. 21 as follows:

Bids for Constructing Gun Emplacements near the Mouth of Cape Fear River, N. C.

| Quantities. | J. J. Shipman, Washington, D.C. | J. L. Grim, Philadelphia, Pa. | L. H. Skinner, Wilmington, N.C. | J. Friday, Pittsburg, Pa. | Stewart Contracting Co., Columbia, S. C. | A. B. Cook, Petersburg, Va. |
|---|---|---|---|---|---|---|
| Excavation, embankment and grading .. 3,500 cu. yds. | $0.50 | $0.25 | $0.60 | $0.25 | $0.30 | $0.27 |
| Filling, in excess of excavation 7,000 " " | .60 | .27 | .60 | .25 | .30 | .27 |
| Concrete, mixing and placing 7,500 " " | 5.00 | 1.65 | 11.00 | 2.60 | 4.92 | 8.10 |
| Large broken stone, placing, per cu. yd.. 1,000 tons | 7.00 | 1.45 | 6.00 | 2.80 | 1.33 | 8.10 |
| American Rosendale cement 14,000 bbls | 2.00 | 1.20 | 1.25 | 1.30 | 1.10 | 1.20 |
| " Portland cement 2,000 " | 5.00 | 2.65 | 3.10 | 2.50 | 2.25 | 2.40 |
| Small broken stone 7,500 cu. yds. | 3.50 | 2.97 | 3.78 | 2.60 | 3.90 | 2.80 |
| Large broken stone 1,000 tons | 6.50 | 2.50 | 4.00 | 2.80 | 2.75 | 2.00 |
| Fine crushed granite 150 cu. yds. | 6.50 | 5.40 | 5.00 | 2.60 | 6.90 | 3.20 |
| Iron ladders 4 each | 10.00 | 25.00 | 12.50 | 15.00 | 12.00 | 18.00 |
| Iron railing 200 ft. | .20 | .24 | 1.50 | 2.00 | 1.00 | .15 |
| Wooden doors, single leaf 12 each | 12.00 | 29.00 | 15.00 | 100.00 | 75.00 | 18.00 |
| " double " 12 " | 22.00 | 60.00 | 30.00 | 175.00 | 150.00 | 31.00 |
| 4-in. cast-iron drain pipe 100 ft. | 1.50 | .60 | .55 | .50 | .50 | .25 |
| Iron perforated covers for drains 20 each | 5.00 | .50 | 1.00 | 7.50 | 2.00 | .50 |
| 6-in. porous tile drain pipe 400 ft. | .25 | .15 | .30 | .35 | .50 | .20 |
| Brass tube, 1 in. diam., ⅛-in. thick 300 " | .25 | .40 | .75 | .50 | .60 | .40 |
| Hrd rubber or fiber tubes, 1-in. inside diam 40 " | .15 | 1.20 | .30 | .30 | 1.00 | .80 |
| Cast-iron steps, flights 2 each | 100.00 | 110.00 | 300.00 | 200.00 | 125.00 | 100.00 |
| Steel I-beams and channel irons, etc. 25,000 lbs. | .05 | .03 | .04½ | .03½ | .03½ | .04 |
| Hard burnt red brick, per M. 15,000 | 22.00 | 13.00 | 10.00 | 15.00 | 15.00 | 15.00 |
| Steel anchor bolts, nuts, and washers 8,402 lbs. | .10 | .05 | .05 | .06 | .07 | .04 |
| Total | $122,045 | $66,631 | $91,578 | $75,237 | $90,027 | $115,148 |

LEVEE WORK.—Memphis, Tenn.—Lieut. H. C. Newcomer, U. S. Engr., informs us that the following were the lowest bids received Nov. 23 for 2,736,000 cu.yds. of levee work; the total is said to be $62,000 less than when bids were opened Nov. 7 for same work:

In the Lower Yazoo District.

| | | cts. |
|---|---|---|
| Ernest Hyner, Greenville, Miss | 75,000 cu. yds. at | 11.9 |
| Arnold & De Garis, Memphis, Tenn | 85,000 " " " | 11.4 |
| C. A. Winter, Pettit, Miss | 75,000 " " " | 12⅞ |
| Ernest Hyner, Greenville, Miss | 20,000 " " " | 13 |
| Ernest Hyner, Greenville, Miss | 80,000 " " " | 11½ |
| E. B. Mantle, Memphis, Tenn | 60,000 " " " | 12 |
| L. C. Dulaney, Duncansby, Miss | 85,000 " " " | 9.23 |
| T. S. Aderholdt, Friar's Point, Miss. | 125,000 " " " | 10.74 |
| T. S. Aderholdt, Friar's Point, Miss. | 80,000 " " " | 10.24 |
| W. A. Shippey, Memphis, Tenn | 245,000 " " " | 17.98 |
| P. F. Lamb, Stafford, Miss | 100,000 " " " | 12½ |
| Robert Johnson, Memphis, Tenn | 90,000 " " " | 14 |
| Ernest Hyner, Greenville, Miss | 207,000 " " " | 12 |
| C. A. Winter, Pettit, Miss | 72,000 " " " | 10⅝ |
| J. B. Lewis, New Gascony, Ark | 82,000 " " " | 10.79 |
| W. A. Shippey, Memphis, Tenn | 114,000 " " " | 11.03 |
| W.M. Bates & Co., Texarkana, Tex. | 74,000 " " " | 13 |

The Upper Tensas District—Amos Bayou Line.

| | | |
|---|---|---|
| J.M. Whitehill, Arkansas City, Ark. | 45,000 cu. yds. at | 12½ |

Mississippi River Levees above Greenville.

| | | |
|---|---|---|
| J.M. Whitehall, Arkansas City, Ark. | 115,000 cu. yds. at | 13.90 |
| J. B. Lewis, New Gascony, Ark | 90,000 " " " | 13.73 |
| Arnold & De Garis, Memphis, Tenn. | 60,000 " " " | 19.7 |

Mississippi River Levees below Greenville.

| | | |
|---|---|---|
| Arnold & De Garis, Memphis, Tenn. | 102,000 cu. yds. at | 17.9 |
| C. A. Winter, Pettit, Miss | 59,000 " " " | 22⅝ |
| Jos. H. Cary, Memphis, Tenn | 15,000 " " " | 25 |
| J. G. Sessoms, Fetter's Ldg, Miss. | 82,000 " " " | 18.33 |
| W.M. Bates & Co., Texarkana, Tex. | 92,000 " " " | 15 |
| L. C. Dresbach, Memphis, Tenn | 72,000 " " " | 14⅞ |

In the Middle Tensas District.

| | | |
|---|---|---|
| Arnold & De Garis, Memphis, Tenn. | 160,000 cu. yds. at | 12.4 |
| F. M. McLaughlin, Waterproof, La. | 66,000 " " " | 15 |
| Robt. Nicholson, Villa Vista, La. | 213,000 " " " | 10.74 |

GUN EMPLACEMENTS AND WHARF.—Washington, D. C.—Maj. Chas. J. Allen, U. S. Engr., has sent us a detailed statement of the bids received Nov. 23 for constructing gun emplacements and wharf at Sheridan Point, Va., as advertised in Engineering News; the total bids being as follows:

| | |
|---|---|
| G. Snowden Andrews & Henry T. Douglas[1] | $58,684 |
| Owen Patterson, Baltimore | 69,223 |
| Cranford Paving Co., Washington | 70,297 |
| John J. Shipman, Washington | 70,452 |
| Sanford & Brooks, Baltimore | 72,295 |
| Am. Artificial Stone Pavement & Construction Co.[2] | 74,348 |
| J. L. Grim, Philadelphia | 77,251 |
| R. H. Hood, Washington | 77,262 |
| Frank Pidgeon, Saugerties, N. Y. | 85,127 |
| Benj. F. Sweeten & Son, Camden, N. J. | 93,031 |
| John Jacoby, Wilmington, Del | 97,668 |

[1]Baltimore; [2]Philadelphia.

The prices of the lowest bid were as follows: For all piles in place, 12 and 22 cts. a lin. ft.; lumber in the wharf in place, $8.20 and $39 M. ft.; iron in place in the wharf, 2⅝ cts. a lb.; stripping soil, measured when piled, 25 cts. a cu. yd.; excavation and embankment, measured in the cut, 25 cts. a cu. yd.; soil covering, measured in place on the slopes, 50 cts. a cu. yd.; gravel laid in place on the roadway, ramps, etc., $1.07 a cu. yd.; natural cement concrete laid, $4.43 a cu. yd.; granolithic

concrete laid, $9 a cu. yd.; steel beams complete in place, 3 cts. a lb.; anchor bolts for each platform complete, $149 per set; trolleys complete in place, $442.41; doors complete, $38 each; brick masonry, $9 a cu. yd.; latrines complete in place, $30; square drain tile laid, 12 cts. a lin. ft.; round drain tile laid, 9 cts. a lin. ft.; 6-in. vitrified sewer pipe laid complete, 30 cts. a lin. ft.; 8-in. vitrified sewer pipe laid complete, $1.02 a lin. ft.; 4-in. cast-iron pipe laid complete, 42 cts. a lin. ft.; 6-in. cast-iron pipe laid complete, 55 cts. a lin. ft.; basin heads and gratings laid complete, 3½ cts. a lb.; gutters laid complete, 19 cts. a lin. ft.; gravel backing, 96 cts. a cu. yd.; well complete, $3 a lin. ft.; ammunition lifts, $1,750 and $585 a set; cranes complete set up, $90 each; electric lighting plant complete, $3,000; ladders and railings complete in place, $348 a set; wrought-iron steps in place, $153 a set; ventilating pipes, etc., 30 cts. a lin. ft.; speaking tubes laid, 20 cts. a lin. ft.; total, $58,684.

GUN EMPLACEMENTS.—Newport, R. I.—Maj. D. W. Lockwood received the following bids Nov. 24 for constructing gun emplacements at Dutch Island, as advertised in Engineering News:

McDONALD & SAYRE, Third National Bank Bldg., Syracuse, N. Y., have been awarded the contract for Section II. of the Middle Division of the Erie Canal running through Syracuse, N. Y. The work includes 210,000 cu. yds. of excavation; 1,000,000 ft. of timber and about 15,000 cu. yds. of masonry.

THE WESTERN ENGINEERING CO., of Ottumwa, Ia., has just completed the construction of a water-works system at Story City, Ia.; also the installation of a hot water heating system in the Allen House, a steam heating plant in the creamery, and hot water connections in a private residence, all at Story City, Ia.

THE CAMPBELL & ZELL CO., Baltimore, Md., has had a receiver appointed. The firm conducted a business as engineers and contractors and was also proprietor of the Enterprise Marine & Boiler Works and the Enterprise Iron Works. The total assets of the company on Oct. 1 were estimated at $432,000, and the liabilities at $163,878.

MR. JOHN P. FORCE, of Fostoria, O., has recently completed a sewage disposal plant for the Ohio state reformatory, at Mansfield, O., and has just been engaged to prepare plans for similar works at the state hospital at Toledo. He has also been engaged to prepare plans for a sewer system at Chillicothe, O., and for both water-works and sewers at Shelby, O.

Bids Received Nov. 24 for Constructing Gun Emplacements on Dutch Island, R. I.

| Quantities. | | Manhattan Concrete Co., New York, $67,247. | Sooysmith & Co., New York, $51,405. | R. M. Dudley, 18 Broadway, New York, $56,967. | F. Pidgeon, Saugerties, N. Y., $51,141. | J. L. Grim, Philadelphia, Pa., $63,843. | Hughes Bros. & Range, Syracuse, N. Y., $61,358. | E. W. Everson, Providence, R. I., $62,885. | Jos. P. Cotton, Newport, R. I., $60,559. | Wilson & Baillie Mfg. Co., Brooklyn, N. Y., $73,346. | Fred'k E. Shaw, Providence, R. I. $51,963. | Clark & Co., New York, $72,993. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Excavation | 7,000 cu. yds. | $0.73 | $1.50 | $0.30 | $0.85 | $0.40 | $0.40 | $1.35 | $0.64 | $0.70 | $0.75 | $1.40 |
| Filling, earth | 3,000 " " | .31 | .50 | .25 | .70 | .30 | .20 | .30 | .40 | .25 | .40 | .60 |
| Filling, loam | 800 " " | .31 | 1.00 | .25 | .80 | .50 | .20 | .30 | .53 | 1.50 | .50 | .35 |
| Sod | 2,350 sq. " | .33 | .40 | .30 | 2.00 | .40 | .25 | .50 | .32 | .80 | .30 | .40 |
| Broken stone | 300 cu. " | 1.50 | 2.00 | 2.50 | 2.50 | 2.65 | 2.25 | 2.50 | 2.50 | 3.00 | 3.00 | .75 |
| Concrete, nat. cem. | 6,200 " " | 7.10 | 7.00 | 5.40 | 7.00 | 5.85 | 6.37 | 5.75 | 6.45 | 6.50 | 8.00 | 6.50 |
| Am. Port., ordinary | 320 " " | 9.00 | 10.00 | 7.40 | 10.00 | 6.95 | 7.50 | 7.00 | 8.73 | 9.00 | 10.00 | 8.50 |
| Granolithic | 130 " " | 15.00 | 12.00 | 8.40 | 12.00 | 9.50 | 7.50 | 9.50 | 11.00 | 17.00 | 13.00 | 12.00 |
| Facing | 200 " " | 14.00 | 15.00 | 11.00 | 15.00 | 12.00 | 7.50 | 12.00 | 17.00 | 17.00 | 18.00 | 14.00 |
| Stone in mass concrete | 3,500 tons | 1.15 | 3.00 | 1.90 | 2.00 | 2.35 | 1.50 | 3.00 | 1.75 | 2.50 | 3.00 | 1.90 |
| I-beams (steel) | 33,000 lbs. | .03 | .03 | .02¾ | .06 | .02⅞ | .03 | .03½ | .04¾ | .04½ | .03 | .05½ |
| St'l tr'ly b'ms & tr'ley | 12,000 " | .04 | .10 | .04 | .10 | .15 | .15 | .05 | .08 | .08 | .08 | .07 |
| Anchor bolts, etc. | 4,300 " | .05 | .03 | .03½ | .10 | .05 | .06 | .05 | .05½ | .04 | .10 | .06 |
| Lumber, doors | 1,300 ft. B.M. | .09 | .07 | .20 | 150.00 | .10 | 80.00 | .12 | 200.00 | .15 | .07 | .10 |
| Brass door fittings | 1,800 lbs. | .24 | .40 | .30 | .50 | .50 | .40 | .70 | .27 | .50 | .50 | .50 |
| White pine strips[1] | 600 ft. B.M. | .09 | .10 | .20 | 150.00 | .07 | 50.00 | .12 | .12 | .15 | .06 | .10 |
| Galv. i. pipe, 1½-in., etc. | 302 ft. | .23 | .04 | .25 | .30 | .12 | .20 | .50 | .13 | .30 | .15 | .12 |
| Granite steps and c'rb'g | 10 cu. yds. | 50.00 | 60.00 | 27.00 | 40.00 | 50.00 | 50.00 | 50.00 | 34.00 | .50 | 30.00 | 50.00 |
| Iron pipe, 4-in. | 130 ft. | .25 | .20 | .50 | 1.00 | .35 | .25 | 2.00 | .87 | .45 | .60 | .60 |
| 8-in. glazed sewer pipe | 385 " | .23 | .20 | .30 | 1.00 | 1.00 | .25 | 4.00 | 1.37 | .80 | .30 | .30 |
| 4-in. porous drain tile | 600 " | .20 | .10 | .08 | .75 | .65 | .10 | .30 | .27 | .40 | .08 | .15 |
| Brick for manholes, per M. | | 20.00 | 20.00 | 20.00 | 30.00 | 18.00 | 15.00 | 26.00 | 35.00 | 22.00 | 20.00 | 30.00 |
| Manhole covers | 2 | 20.00 | 10.00 | 10.00 | 30.00 | 12.00 | 25.00 | 15.00 | 15.00 | 25.00 | 12.00 | 14.00 |
| Stairs and hand rails | 2 | 200.00 | 200.00 | 100.00 | 250.00 | 210.00 | 300.00 | 500.00 | 327.00 | 200.00 | 175.00 | 70.00 |
| Double lifts, complete | 2 | 500.00 | 1,000 | 3,400 | 2,000 | 1,800 | 1,600 | 1,200 | 2,712 | 1,200 | 500.00 | 900.00 |

[1]For electric connections.

MACADAMIZING, ETC.—Pittsburg, Pa.—The contracts for constructing the Grant boulevard, which was awarded to W. E. Howell & Co., at $378,663, some time ago, has been assigned to Werneberg, Sheehan & Co., of New York, said to consist of John C. Sheehan and John O'Brien, of New York, Neil McLaughlin, of Brooklyn, and Henry J. Werneberg, until a few years ago a member of Werneberg Bros., a contracting firm of Pittsburg. A local paper says that the itemized prices of the contract are as follows: Grading, 37 cts. a cu. yd.; macadamizing, $1.20 a sq. yd.; curbing, 50 cts. a lin. ft.; curbing reset, 20 cts. a lin. ft.; crossings, 60 cts. a sq. ft.; crossings relaid, 20 cts. a sq. ft.; masonry, first-class, $7.50 a cu. yd.; masonry rubble, $6 a cu. yd.; concrete, $6 a cu. yd.; drops, $10 each; manholes, $10 each; 24-in. sewer pipe, $2.50 a lin. ft.; 15-in. sewer pipe, $2.06 a lin. ft.; iron fence, 90 cts. a lin. ft.; French drain, 50 cts. a lin. ft.

WATER-WORKS.—St. Augustine, Fla.—The awarding of contracts for water-works, as advertised in Engineering News, was noted last week under Water-Works. The bids ranged as follows: Laying 4-in. pipe, 8 to 10 cts.; 6-in., 9 to 12 cts.; 8-in., 10 to 15½ cts.; 10-in., 11½ to 20 cts.; 12-in., 13 to 24 cts.; hydrants, $20.34 to $24.30 each; pipe, $18.24 to $21.44 a ton; specials, $42.50 to $45. J. N. Hazlehurst, Engr., Atlanta, Ga.

## INDUSTRIAL NOTES.

THE RHODE ISLAND LOCOMOTIVE WORKS, Providence, R. I., has been attached by the Midvale Steel Co., Philadelphia. The debt is announced to be $12,000.

THOS. CARLIN'S SONS, Allegheny, Pa., have received an order from an eastern contractor for a large stone quarry plant, including steel drums, cars, rope, etc.

HEYL & PATTERSON, of Pittsburg, are said to be putting in a coal conveying plant for the Shoenberger Steel Co., which will have a carrying capacity of 75 tons a day.

THE AMERICAN BRIDGE WORKS, Chicago, is said to have been awarded contracts for 68 iron and steel bridge superstructures on the Atchison, Topeka & Santa Fe Ry.

THE CARROLL PORTER BOILER & TANK CO., Pittsburg, Pa., has been awarded the contract for the last three miles of 42-in. force main for the Duluth, Minn., water-works.

THE PITTSBURG LOCOMOTIVE WORKS, of Pittsburg, Pa., has built 20 engines for the Baltimore & Ohio R. R. They have cylinders 22 × 28 ins., and weigh 85 tons, including tenders.

A. A. GOODRICH & CO., Detroit, Mich., are said to have received an order for 2,000 tons of charcoal pig iron for Buda-Pesth, Austria. The iron is required for the manufacture of car wheels.

THE OHIO FALLS CAR MFG. CO., Jeffersonville, Ind., is said to have received from the Sierra Madre & Pacific Ry., in Mexico, an order for 150 box cars, seven passenger coaches, a private car and three cabooses.

MR. J. A. WEBSTER, Orange, Mass., of the firm of Barrett & Webster has bought the interest of the late A. L. Barrett, and will carry on the business of contracting for artesian wells, connecting and setting up windmills, steam drilling for blasting, etc.

THE ALLISON DRY DOCK CO., Jersey City, N. J., has had its property sold by the receiver for $20,700. R. A. Simpson, Pres. C. A. Woolsey Paint Works Co., was the purchaser. The dry dock business will be continued by a new company, which Mr. Simpson represented.

THE SOUTH BROOKLYN STEAM ENGINEERING WORKS, Brooklyn, N. Y., manufacturers of steam engines, castings, and machines, at Van Brunt and Summit Sts., has made a general assignment for the benefit of creditors, to James H. Taylor, of 252 President St.,

THE CRESCENT SHIP YARDS, Elizabeth, N. J., has recently launched an automatic garbage dumping boat of 600 cu. yds. capacity, designed by Lieut. Daniel Delehanty for the New York street cleaning department. She is a twin screw, double hulled vessel and is formed of two pontoons, each 135 ft. long, 8 ft. wide and 10 ft. deep. Between these pontoons is hung the garbage-carrying compartment. When the craft is light the garbage compartment will ride clear of the water, thus reducing the displacement. The pontoons are divided into a number of water tight compartments, so that it will be very hard to sink the vessel under any circumstances.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., has secured several recent contracts for steel roofs covered with corrugated iron, lined with its patent anti-condensation roof lining, including one for the new power station for the Stamford Gas & Electric Co., at Stamford, Conn. The engine and dynamo room of this station is 60 × 100 ft., and the boiler room adjoining is 40 × 75 ft. The walls are of brick, and the framework of the roof as well as the supports for the traveling crane in the engine and dynamo room are of steel. The Berlin Co. has the contract for furnishing and erecting all of the structural steel work.

THE LIDGERWOOD MFG. CO., New York city, writes us in reference to a notice in our issue of Nov. 5 which stated that the machinery now in use on the Panama Canal is like that used on the Chicago Drainage Canal. Seven standard Lidgerwood cableways, with steel towers and aerial dump, similar to those employed on the Chicago Drainage Canal are being used. The cableways are not traveling although the company strongly urged them. The cableways are used for the purpose of handling earth from cars in the bed of the canal, to hoppers, arranged over cars on the berm. The material excavated has all to be hauled some distance and cannot be wasted on the berm; it is necessary to employ some sort of device for taking the loaded skips from the canal, and delivering them to the cars, and the cableway was adopted for that purpose. These cableways were set up entirely under the direction of the company and have been completed and satisfactorily tested.

ALFRED BOX & CO., Philadelphia, are said to have recently completed a 10-ton traveling crane for the Phosphor-Bronze Smelting Co., Philadelphia; a complete system of trolley trackage for the shell rooms of the United States battle ship "Indiana;" also trolley trackage systems for the navy yard, Charleston, S. C., and the foundry of E. & T. Fairbanks Co., St. Johnsbury, Vt.; a 20-ton traveling crane for the New York, New Haven & Hartford R. R. Stamford Station; a 5-ton traveling crane for the Steinway Ry. Co., Woodside Station, L. I., and five 5-ton gib cranes for the New York navy yard. Among the orders now in course of completion is a 35-ton traveling crane for the new power house of the Liggett & Myers Tobacco Co., St. Louis, Mo.; a 10-ton power traveler for the stone yards of John M. Gesslers Sons, Philadelphia, and four 6-ton traveling cranes for the Union Traction Co., Philadelphia.

NEW COMPANIES.—Minnesota Hedge & Wire Fence Co., Minneapolis, Minn.; $300,000; P. D. McMillan, Henry Doerr, Robert Pratt.

The Easton Mining Syndicate, Toronto, Ont.; to erect and operate mills, smelters, etc., and to operate tramways by steam and electric power; $1,000,000, commencing with $500; W. K. McNaught, Frank Rolph, A. F. Webster.

Interior Tie & Ore Co., Charleston, W. Va., to mine iron and to acquire timber land; $10,000, commencing with $100; Frank Woodman, C. C. Dawley, W. E. Brooks.

South Atlantic Export Co., Norfolk, Va.; to operate steamship lines; $1,000,000, commencing with $10,000; C. M. Stewart, G. F. Patterson, Robert Ramsey.

H. E. Burleigh & Brother Transportation Co.; $30,000; to operate on Lake Champlain, Champlain Canal and Hudson River; H. E. Burleigh, Jr., Chas. R. Burleigh, B. W. Burleigh, of Ticonderoga.

George J. Stadler Brewing Co., Chicago; $50,000; Geo. J. Stadler, Wm. J. Rohde and Joseph Stash.

The Interstate Telephone Co., Tuscola, Ill.; $50,000; Albert W. Wallace, Samuel S. Goehring and John T. Todd.

German-American Tile Co., of New York city; $5,000; to manufacture tiles, tiling bricks and blocks, and asphalt plates by the Roentis and Luebes tiling machines; John D. Crimmins, Jr., Emil Frank and Maurice D. Barry, of New York city.

National Contracting Co., of New York city; $100,000; to lay asphalt and brick pavements and do all kinds of public and private work; A. L. Barber, F. V. Greene, C. K. Robinson, New York city.

Standard Construction Co., Tacoma, Wash.; $100,000; E. A. Greene, A. E. Bull.

Climax Machine Co., Stockton, N. J.; to manufacture engines, boilers, fans and ventilating and heating apparatus; $10,000, all paid in; Daniel Donehoo, New Cumberland, W. Va.; James C. Donehoo and Elizabeth Donehoo, Philadelphia, Pa.

Wanamassa Amusement Park Association, Wanamassa, N. J.; $150,000, commencing with $1,000; R. Leu Broeck Stout, F. C. Braentigan, Jos. C. W. Stout.

British American Machinery Co., Jersey City, N. J.; to manufacture iron and steel; $500,000, commencing with $1,000; Henry J. Fink, Jere. H. Goldham, Edmund C. Moore, New York city.

H. D. Bayne & Co., New York city; to carry on a general engineering and contracting business; $10,000; H. D. Bayne, H. E. Hartwell and J. Lynch Pendergast, of New York city.

National Paper Stone Co., Buffalo, N. Y.; to manufacture paper-stone compositions, roofing and wall plaster; $50,000; Arthur H. Martin, W. G. Thatcher, Robt. E. Tinker.

Hascall Steam Generator Co., New York city; $100,000; J. Ellis Hoffman, E. J. Rosenfeld, of New York city, and W. F. Hascall, of Boston, Mass.

McClelland Oil Purifier Co., New York city; to manufacture oil purifiers and oil tanks; $10,000; George R. Graham, David H. McClelland, and Edward W. Dewey, of New York city.

Automatic Meter Co., New York city; to manufacture automatic prepayment attachments to gas meters; $50,000; Frank E. Morgan, Joseph Levi, Wm. S. Gordon.

Phoenix Cap Co., of New York city; to manufacture caps and capping machines; $150,000; Albert H. Gleason, Martin Saxe and Charles A. Stewart.

Lonsberry Mfg. Co., Chicago; to manufacture electrical machinery; $25,000; Herbert H. Hewes, Geo. C. Purdy, David B. Carse.

Royal Mfg. Co., Jersey City, N. J.; to produce and sell water, steam and electric power; $12,000, all paid in; Wm. A. Thompson, Freehold, N. J.; Jos. F. Nerriam, G. W. Kitchell, New York city.

Spokane & Rossland Telephone Co., Spokane, Wash.; to construct a telephone line between Spokane and Rossland; $50,000; W. B. Aris, Wm. H. Oakes, Emerson Blackmore, Meyers Falls, Wash.

**Contract Work Should Always be Advertised in a Paper Read by Contractors.**

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